AIR LIQUIDE Healthcare

Oxygen Therapy and Medical Suction Catalogue

Making medical procedures easier

www.airliquidemedicalsystems.com

Air Liquide Healthcare is a world leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients. Our aim is to provide continuous care from hospital to home with medical products, specialty ingredients and services that contribute to protecting vulnerable lives.

Air Liquide Medical Systems, a subsidiary of Air Liquide Healthcare, are experts in the field of ventilation and respiratory assistance devices. Its employees are committed to the design, manufacture and sale of innovative products and solutions for ventilation, devices for distribution and administration of medical gases, and aerosol therapy.

With a constant concern for improving patient care and satisfying the expectations of healthcare professionals, Air Liquide Medical Systems offers solutions combining quality with ergonomics.

Innovation

Innovation is central to Air Liquide Medical Systems' products. Our priority is to contribute to the quality of care by optimizing patient comfort and simplifying the use of our products.

Expertise

Air Liquide Medical Systems has a 40 year history of listening to its customers and working with healthcare professionals. We create solutions that keep up with the changes in medical practice.

Commitment

Safety, Quality and Environment

We design our products based on ensuring safety and quality in respect of patients, users and employees, and regulatory compliance. Air Liquide Medical Systems is committed to an ongoing initiative to reduce its environmental impact.

Service

Local and responsive

Whatever the situation, you can always count on the expertise of our hotline and our local technical teams. They will help you ensure the safety of your patients and get the best performance out of your equipment.

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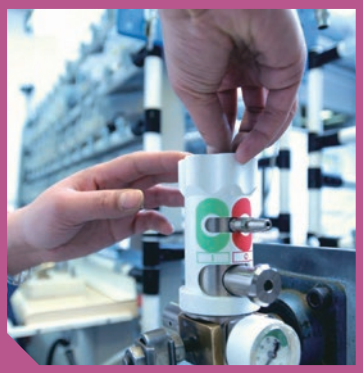
High pressure Low pressure

1 Standards and connectors



High pressure 6

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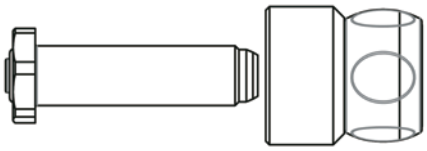
Easyclic,
connecting safely 9

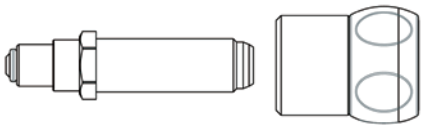
Standards and high-pressure connectors

As the field of equipment for pressure reduction, flowmetering and suction is not unified, standards will differ depending on the country. In order to best meet the diverse requirements of the markets, Air Liquide Medical Systems offers its medical devices over a wide range of standards.

AFNOR Standard (NF E 29-650)



Type	F
Gas	O_2
Bolt[1]	Male
Direction	To the right
Ø	22.91 mm
Profile	S.I
Step	1.184

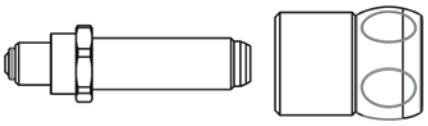


Type	D
Gas	Medical Air
Bolt	Female
Direction	To the right
Ø	24 mm
Profile	W
Step	2

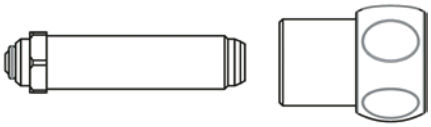
Additional Information:

The type F connector is offered in 3 lengths:

- NF type F = 43 mm
- NF type F medium = 58 mm
- NF type F extended = 80.5 mm



Type	L
Gas	O_2/N_2O
Bolt	Female
Direction	To the right
Ø	27 mm
Profile	W
Step	2

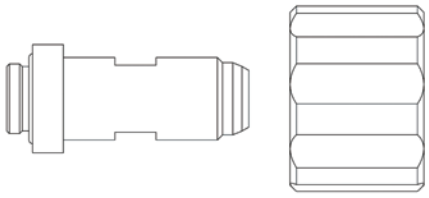


Type	G
Gas	N_2O
Bolt	Male
Direction	To the right
Ø	26 mm
Profile	S.I
Step	1.5

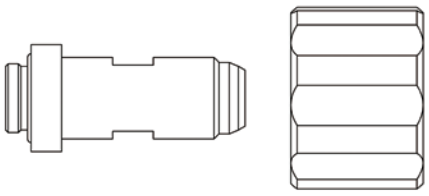
[1] *Nut on the high pressure connector*

Standards and high-pressure connectors

Standard DIN 477-1

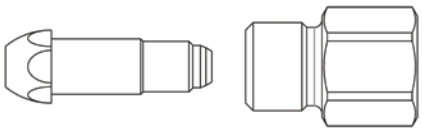


Connector number	9
Gas	O_2
Connector type	A
Bolt	Female
Direction	To the right
Ø	26.441 mm
Profile	W
Step	1.184



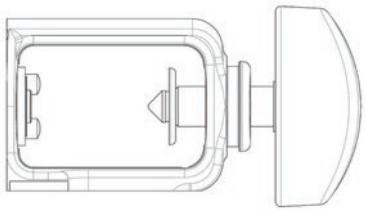
Connector number	13
Gas	Medical Air
Connector type	D
Bolt	Male
Direction	To the right
Ø	22.91 mm
Profile	W
Step	1.814

Standard BS 341-3



Connector number	3
Gas	O_2 - Air
Ecrou	Male
Bolt	To the right
Direction	22.911 mm
Ø	5/8<BSP F14
Profile	1.814

Standard pin-index EN ISO 407



Size	mm
t	13.6 ± 0.07
u	4.4 ± 0.15
w	8.8 ± 0.07

For any requirement on a specific standard and/or on another medical gas, contact us

Standards and low-pressure connectors

Taking into account the many different wall outlet standards existing all over the world, Air Liquide Medical Systems proposes the availability of its devices within a wide range of connectors and even studies their adaptation according to the different existing standards for use with medical gases.

Standard AFNOR (NF) NF S 90-116

Easyclic
- O_2
- Air
- Vacuum

Standard DIN 13,260-2

DIN O_2

- O_2
- Air
- Vacuum

Standard BS 5682

BS O_2

- O_2
- Air
- Vacuum

For any requirement on a specific standard and/or on another medical gas, contact us

EASYCLIC simply easy

Air Liquide Medical Systems provides this patented technology on the low pressure NF connectors. Easyclic combines unequalled strength with the ease of connecting the device to the outlet. This innovation is employed in O_2 and Air flowmeters (Selectaflo, Floval), as well as vacuum regulators (Lagoon).

EASYCLIC NF inlet connector: connecting safely

- Handled with just one hand, solid and precise connection
- No risk of pinching fingers
- Robustness
- 360° orientation

Easy connection

- Push, turn, it's installed!
- One-handed set up

Simplify the medical procedure

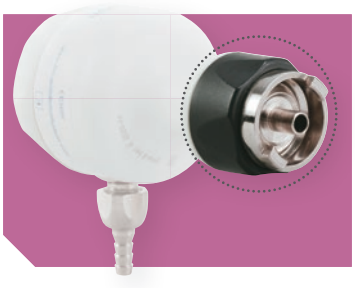
- 360° rotation - can be adapted to all situations
- Simple orientation of the device, limits the risks of bending the tubing

Strength in all circumstances

- Chrome-plated brass
- Shock resistant
- Anti-UV treated housing

Devices fitted with the Easyclic NF connector

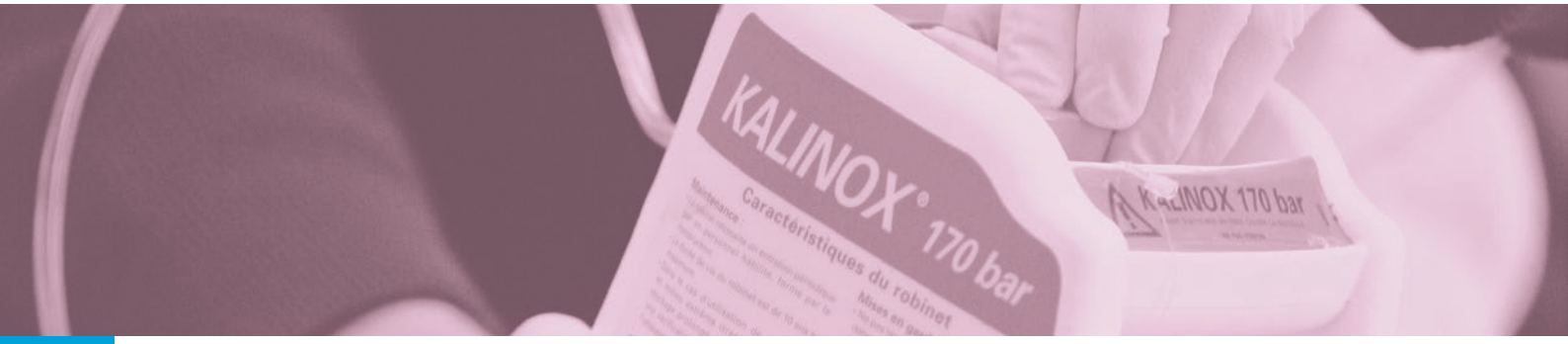
Lagoon vacuum regulator



Selectaflo flowmeter

Easyclic

Supply pressure	3.5 bar to 5 bar – up to -950 mbar for vacuum
Weight	111 g
Dimensions	50x36x36 mm
Standard of connection	NF
Material	Nickel-plated brass



2 High pressure oxygen therapy devices

Valve with integrated pressure reducer

Compact G2 12
Tipi 18

High pressure reducers

Selectaflo HP 22
Preci 26
Domiflo 28
Protal II 30

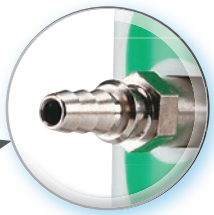
Accessories

Emboufix 32

Compact G2
Valve with integrated pressure reducer

Compact G2 combines the three devices required to deliver medical gases from cylinders in one device: a valve, a high-pressure reducer and a flowmeter with calibrated orifices. It fits onto medical gas cylinders under high pressure (up to 300 bar) and is protected by a dedicated cover.

Compact G2
with standard manometer



Flow nozzle with tight connection

Double windows of flow reading

Compact G2
TAKEO™ with TIPI

PATENTED PATENTED

Easy

- Easy-to-open valve with 1/4 turn
- Direct access to gas connections close to the pressure gauge to care and watch the patient without handling the cylinder
- Active pressure gauge to see remaining pressure information at all times
- TIPI digital gauge as an option
- Flow nozzle with tight and safe connection
- Large selection knob and clicking system for an easy flow setting

Sturdy

- Nickel-plated brass body
- Two-stage pressure reduction ensuring high precision and stability of output flow whatever the pressure in the cylinder
- 10-year lifetime with simplified maintenance*

Everyday safety with long term reliability

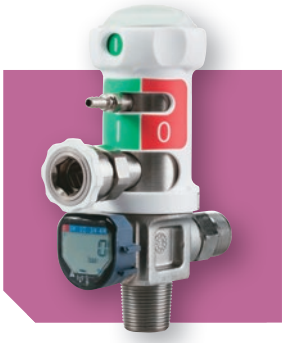
- Designed to last and to ensure a safe use of medical gases under high pressure, Compact performed tests required by the standard and by Air Liquide internal safety guidelines (endurance, pill-test, adiabatic compression test)
- Patient's safety: the valve must be opened to select a flowrate and it is impossible to close the valve if a flowrate is selected

Suitable for all situations and environments

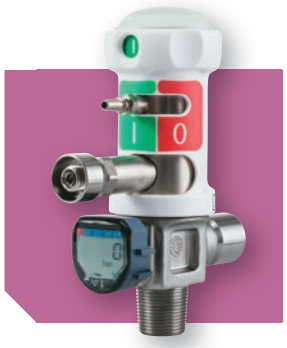
- Closely of 500 00 units in usage in the world
- Exists in several versions of pressure outlets: classic or digital pressure gauge, cylinder pressure up to 300 bar
- Protection by ergonomic, exclusive and sturdy plastic covers
- 10-year lifetime with simplified maintenance*
- Innovation: 8 patents

* *for Compact G2 O_2 200 bar only. The replacement of parts during preventive maintenance after 5 years for Compact G2 O_2 is no longer necessary. Under national regulations in force, this new maintenance policy may require approval of the competent authority, within the framework of the Marketing Authorization, before it can be implemented.*

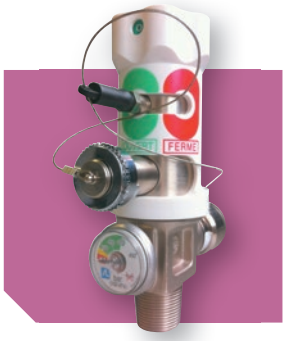
The expertise in high-pressure devices



Compact G2 Takeo



Compact G2 Takeo Australia



Compact G2 300 Bar

References

Type	Designation x10	Reference	Gas	Pressure gauge	Low pressure outlet	Inlet screw thread	Filling connector
AFNOR (NF)	Compact G2	CK031200	O_2	Standard gauge	AFNOR 5 bar	W 25.8x1.814	Type F
	Compact G2	CK045400	O_2	Standard gauge	AFNOR 5 bar	W 17.4x1.814	Type F
	Compact G2 Takeo	CK031800	O_2	Tipi	NF 5 bar	W 25.8x1.814	Type F
	Compact G2	CK045200	N_2O/O_2	Standard	NF 5 bar	W 25.8x1.814	Type L
	Compact G2 300 bar	CK030100	O_2	Standard	NF 5 bar	W 25.8x1.814	W 30x2
DIN	Compact G2	CK023800	O_2	Standard	DIN 5 bar	W 25.8x1.814	Type F
	Compact G2 Takeo	CK031900	O_2	Tipi	DIN 5 bar	W 25.8x1.814	Type F
	Compact G2	CK030700	O_2	Standard	DIN 5 bar	W 25.8x1.814	German
	Compact G2 Takeo	CK032100	O_2	Tipi	DIN 5 bar	W 25.8x1.814	German
SWITZERLAND	Compact G2	CK032800	O_2	Standard	Swiss 5 bar	W 25.8x1.814	Type F
	Compact G2	CK032900	O_2	Tipi	Swiss 5 bar	W 25.8x1.814	Type F
NORDICS	Compact G2	CK045100	O_2	Standard	Suédoise 5 bar	W 25.8x1.814	Type F
BS	Compact G2	CK045800	O_2	Standard	BS 5 bar	W 25.8x1.814	Type F
	Compact G2 Takeo	CK032000	O_2	Tipi	BS 5 bar	W 25.8x1.814	Type F
AUSTRALIA	Compact G2	CK030000	O_2	Standard	SIS 4.2 bar	W 25.2x1.814	Type F
	Compact G2	CK030600	O_2	Standard	SIS 4.2 bar	W 0.715x1.814	Type F
	Compact G2 Takeo	CK033100	O_2	Tipi	SIS 4.2 bar	W 25.2x1.814	Type F
	Compact G2 Takeo	CK033300	O_2	Tipi	SIS 4.2 bar	W 0.715x1.814	Type F

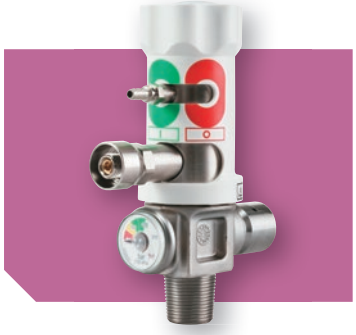
Compact G2

Available gases	O_2 - N_2O/O_2 50%-50%
Cylinder supply pressure	up to 200 or 300 bar according to the model
Outlet pressure	4.2 or 5 bar according to the model
Pressure outlet flowrate	≥ 40 l/min at pressure between 20 to 200 bar
Pressure outlet type	NF - DIN - BS - SIS - Swiss - Swedish
Ajustable flowrates (l/min)	0 - 1 - 1.5 - 2 - 3 - 4 - 6 - 9 - 12 - 15
Flowrates accuracy	± 20% at 1 l/min and 1.5 l/min ; ± 10% from 2 to15 l/min
Mass	1.550 kg
Magnetic mass	14.5 g
Dimensions	115 (L) x 58 (ø) x 173 (H) mm
Temperature ranges for operation and storage	-20 °C à +60 °C
Relative humidity limits for operation and storage	10 à 95%
Materials	Brass – EPDM – PA6 – ABS PC – Stainless steel
Cleaning	with a slightly damp cloth, disinfection with Amphospray 41
Lifetime	10 years
Regulatory compliance	Class IIb medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. - Read carefully the user manual before use. TPED, ISO 10524-3

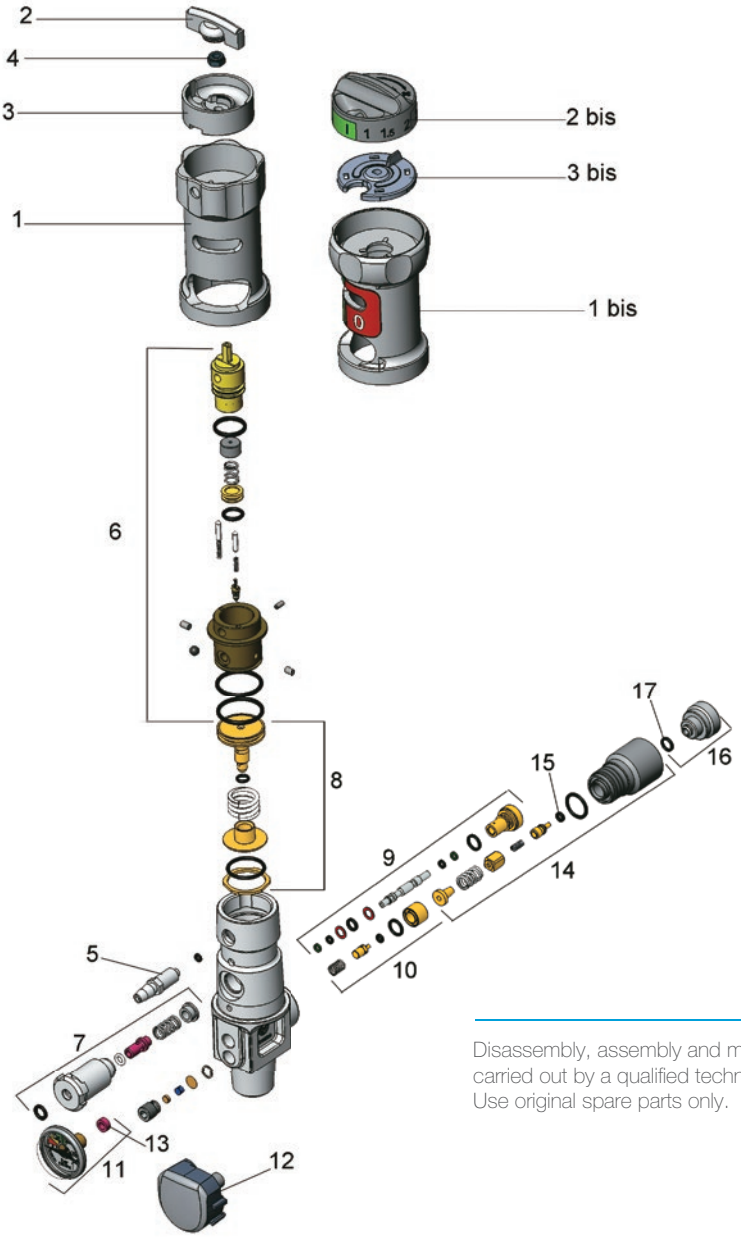
Compact G2
Valve with integrated pressure reducer

Compact G2
with standard manometer

Compact G2 standard DIN



Compact G2 stantard
Australia



Disassembly, assembly and maintenance must be carried out by a qualified technician only.
Use original spare parts only.

The expertise in high-pressure devices

Key for filling connector cap (manual screwing)

Key for filling connector cap (pneumatic screwing)

Standard manoeuvring skirt O_2

TAKEO manoeuvring skirt O_2

Spare parts & maintenance kits

Designation	Reference	Repere
Manoeuvring skirt O_2	CK023301	1
Manoeuvring skirt N_2O/O_2 50%-50% (KALINOX)	CK029800	1
Nylstop bolt M6 stainless steel (x100)	YV203500	4
Knob clip (x50)	CX074400	2
Tampography knob (x10)	CK023400	3
TAKEO manoeuvring skirt O2 (x10)	CX015700	1bis
TAKEO tampography knob (x10)	CX015400	2bis
TAKEO knob disc (x10)	CX015200	3bis
Nozzle valve (x10)	CX075500	5
Flow maintenance kit Compact G2 O_2 NF* (x100)	CY012000	6 + 7
Flow maintenance kit Compact G2 NF Kalinox** (x50)	CY012100	6 + 7
Low pressure outlet O_2 NF	CK023501	7
Low pressure outlet N_2O/O_2 50%-50% (KALINOX) NF	CK028600	7
Low pressure outlet O_2 DIN	BE060100	7
Low pressure outlet O_2 BS (x10)	BE060700	7
1st reducer and valve maintenance kit (x100)	CY009600	8
Equipped valve stem kit (x100)	CY011900	9
Residual pressure kit (x10)	CY010300	10
Manometer and seal kit (x50)	CX090400	11
TIPI digital pressure gauge	CX010500	12
Diabolo pressure gauge seal (x20)	CX079200	13
Maintenance kit for filling valve (x100)	CY009400	14
O ring R1	YJ074400	15
O_2 filling connector cap with seal	CX081000	16
N_2O/O_2 50%-50% filling connector cap with seal	CX087100	16
O ring R5 (x10)	YJ063700	17
O ring R5 (x500)	YJ073500	17
Key for filling connector cap (pneumatic screwing)	CK027300	
Key for filling connector cap (pneumatic screwing)	CK024400	

For complete spare parts list, please refer to Compact G2 Maintenance Manual.

** The replacement of parts during preventive maintenance after 5 years for Compact G2 O_2 is no longer necessary. Under national regulations in force, this new maintenance policy may require approval of the competent authority, within the framework of the Marketing Authorization, before it can be implemented. It is still required to check performances of Compact G2 at 5 years from date of manufacture.*

*** Preventive maintenance at 5 years has to be carried out for Compact G2 N_2O/O_2 50-50 (Kalinox)*

Compact G2 protective cover and accessories

Compact G2 has to be protected by a certified ISO 11117 protective cover. Two ergonomic, exclusive and sturdy plastic covers have been specially designed to protect Compact G2 against impacts and drops.

Takeo plastic cover

Designed for Compact G2 Takeo only

Easy to handle

- Large and comfortable handle
- Direct and easy access to the valve
- Smooth surfaces for easy cleaning

Safe

- High tensile hook for secured bed hanging
- Protective and anti-roll plastic cover
- Compliant to ISO 11117 (Impact Test) for 2 L, 5 L and 11 L aluminium cylinders (20 kg maximum)

Efficient bed hanger

Step 1

Step 2

Step 3

Presence plastic cover

Designed for Compact G2 with standard pressure gauge only

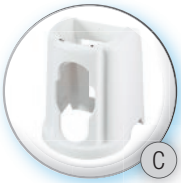
Sturdy

- Closely of 500 000 units in usage in the world
- All-in-plastic for cylinders up to 5 L, with a cast base for cylinders above 5 L to 15 L
- The best protection for Compact G2 with standard pressure gauge

Which plastic cover for which cylinder?

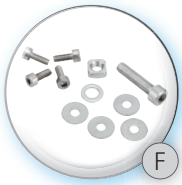
	Compact G2		Cylinder size			
	Pressure gauge Tipi	Pressure gauge Standard	2 L	5 L	11 L	> 11 L
Takeo plastic cover	✔	-	✔	✔	✔	-
Presence plastic cover	-	✔	✔	✔	✔	✔ *
			Plastic base		Cast iron Base	

** Up to 21 kg maximum*



Accessories

Reference	Designation	
CK032200	TAKEO protective cover kit x96 (for Compact G2 TAKEO only)	A
CK034000	TAKEO protective cover kit x10 (for Compact G2 TAKEO only)	A
CK032700	TAKEO bed hanger (x96)	B
CK034100	TAKEO bed hanger (x10)	B
CK023900	PRESENCE protective cover (for Compact G2 standard pressure gauge or Compact G2 TIPI)	C
CK020000	PRESENCE plastic base for cylinder ≤ 5 liters	D
CK021400	PRESENCE cast base for cylinder > 5 liters	E
CY002000	Screw kit for Presence cover and base	F
LE094300	Support kit for humidifier	G
CK012100	Aspal Venturi suction for NF O_2 pressure outlet	H



The Tipi intelligent pressure gauge

Combined with the Compact G2 integrated pressure reducing valve, the Tipi intelligent digital pressure gauge provides medical staff with better control of the cylinder gas autonomy throughout its use and allows them to plan the right time for replacing the cylinder. Tipi provides better safety and peace of mind to medical staff, whilst optimizing medical gas consumption.

Compact G2 Takeo with Tipi and Takeo cap

Time control to improve patient care

- Permanent display of cylinder fill level
- When the cylinder is being used, direct reading of the autonomy displayed as time and as function of the set gas flow rate
- When the flow is shut off, displays the remaining volume of gas in litres (or m^3)
- Visual signal and audible alert when cylinder reaches the last quarter of its autonomy, warning medical staff that the replacement of the cylinder should be planned
- Clear indication of the depletion of the cylinder when the calculated autonomy is less than 15 minutes (second audible alert and the display disappears). The cylinder must be replaced.

Perfectly suited to the most restrictive environments

- Sturdy design: proven resistance to impacts and liquids
- 10-year maintenance-free lifetime
- Innovation: 8 filed patents

Display features

0-200 bar cylinder filling gauge visible at all times (1 segment = 5 bar)

Autonomy displayed:
- in remaining time (hh:mm) during use
- in remaining volume (litres or m^3) when not in use
- in pressure (bar) below 5 bar, empty cylinder

Radio communication for Tipi configuration

Temperature indicator (not activated for Oxygen)

Sound related to display

Visual and audible pressure alert when pressure drops below ¼ of cylinder capacity

Visual and audible autonomy alert when remaining time drops below 15 minutes: time display disappears, continuous flashing starts

Time control

Cylinder not in use
Display in litres
(or m^3 above 2 000 L)

Update in progress

Cylinder in use
Display in time

Display in time or volume
disappears

Tipi

Available gas	O_2
Operating pressure	0-250 bar / 0-3620 PSI - Classe 2.5%
Bursting pressure	1250 bar / 18100 PSI
Units displayed	Bar or PSI (pression), litres or m^3 (volume), hours: minutes (autonomy)
Operating temperature	-20 °C à +60 °C
Storage temperature	-40 °C à +70 °C
Relative humidity during storage and operating	5 to 95% without condensation
Radio communication	433.92 MHz
Protection against shocks and water splashes	IP 55
Cleaning	with a slightly damp cloth
Battery lifetime	10 years
Regulatory compliance	Dispositif médical de classe IIb, CE 0459, CE0459 -Class IIb, ISO 9001, ISO 13485 et ISO 13485

References

Reference	Designation	Type
CK031800	Compact G2 O_2 5 bar NF Takeo (x10)	For Takeo® cover
CK031900	Compact G2 O_2 5 bar BS Takeo (x10)	For Takeo® cover
CK032000	Compact G2 O_2 5 bar DIN Takeo (x10)	For Takeo® cover
CK032100	Compact G2 O_2 5 bar DIN DIN Takeo (x10)	For Takeo® cover

**for more information, please refer to Compact G2 product sheet*

Spare parts

Reference	Designation
CX010500	Tipi digital pressure gauge
CX079200	Diabolo pressure gauge seal (x20)
CX012200	Tipi Canada variant (x126)

Tipi Access & Tipi Tool

Tipi Tool & Tipi Access software can read and configure Tipi intelligent pressure gauges. They can be used by subcontractors responsible for Compact G2 integration on cylinders, by filling centers or during maintenance operations.

Installation of Tipi Access software

Connection of Tipi Tool with Tipi Access

Connection of Tipi Tool with Tipi by radio wave

Tipi activated and configured

Tipi Tool driven by Tipi Access allows several actions:

- Enabling (or disabling) a series of Tipi
- Start new Tipi before installation (i.e. change the size of the cylinder)
- Read the configuration of a Tipi
- Write new parameter inside a Tipi (i.e. Compact G2 serial number)

Tipi Tool

Diameter of antenna	30 mm
Length of antenna	78 mm
Protection	IP 65
Operating temperature	0 °C to +40 °C
Input voltage	100-240V AC +/- 10%
Frequency	50-60Hz
Power supply output	12V, 0.7A max
Electrical class	II
Standards	EN 60950-1, ETSI-EN 301 489, ETSI-EN 300 330 CE 73/23/EEC, 93/68/EEC

References

Reference	Designation	Repere
YA018000	Tipi Tool	1
YR115800	USB connector 1 m (male A – male B)	2
CX011900	Tipi Access software	3

Soft touch ergonomic
rounded handle
Customisable
writing zone
Highly visible
set flow
Easy access
to front connections
Tipi digital gauge
for permanent display
of time remaining
Light cylinder
in highly resistant alloy
Instructions for use
always available
on the cylinder
Highly protective
and anti-roll cap
Easy-to-clean
cap design
Efficient
bed hanger
Large label
for immediate medical
gas identification
AIR LIQUIDE
Santé
TAKEO
O2
GAZ POUR INHALATION EN BOUTEILLE
OXYGENE
MEDICINAL 200 BAR
11L

Selectaflo HP reducer-flowmeter

Selectaflo HP is a flowmeter-pressure regulator designed to be fitted to high-pressure medical gas cylinders. It guarantees the delivery of the desired flowrate to the patient, regardless of the upstream pressure. Used by hospital and medical personnel, it combines sturdiness and ease of use.

Easy setting
Pre-set flow

Unmatched level of safety

- More than 20 years of experience in high-pressure devices
- Parts carefully selected (sealed pressure gauge, anti-UV plastic, etc.)
- Lack of preventive maintenance with compulsory parts

Natural

- Comfortable handling
- Ergonomic design

Safe

- Responsive and precise integrated valve
- Thermal shield: limitation of risk of adiabatic compression
- High-pressure inlet connection filter

Simple maintenance

- Rounded shape
- Smooth surfaces

Accurate and resistant

- Accurate flowrates: dual stage pressure reducer
- Nickel-plated brass body
- ABS and polyamide housing

Selectaflo HP

Availables gases	O_2 - Medical air
Supply pressure	200 bar maximum
Flowrates scales (l/min)	0 - 0.25 - 0.5 - 0.75 - 1 - 1.25 - 1.5 - 2 - 2.5 - **3** 0 - 0.5 - 1 - 1.5 - 2 - 2.5 - 3 - 4 - 5 - **7** 0 - 1 - 1.5 - 2 - 3 - 4 - 6 - 9 - 12 - **15**
Flowrates accuracy	± 30% of the value read, up to 1.5 l/min ± 20% of the value read after 1.5 l/min
Pression de sortie à la prise	4,5 bar
Raccord d'entrée	NF E 29-650 – DIN 477
Prise de sortie	NF S 90-116 – DIN 13260 – BS 5682
Outlet nozzle	M12x125 ou 9/16''
Weight	744 g (with NF/AFNOR low pressure outlet)
Magnetic mass	35.7 g
Dimensions	162 (L) x 56 (Ø) x 100 (H) mm
Materials	Brass - EPDM - ABS
Lifetime	10 years
Cleaning	With a slightly damp cloth, disinfection with a solution carrying the CE marked (Hexanios G+R type)
Regulatory compliance	Class IIb medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use. EN ISO 10524-1

Making medical procedures easier

Selectaflo HP without outlet with NF connector

Selectaflo HP/ O_2 0-15L

Selectaflo HP without outlet with DIN connector

References O_2

Designation	Reference	Gas	Inlet connector	Flowrate range	Output nozzle	Low pressure outlet
Selectaflo HP O_2 3 L NF 12X125	CM085100	O_2	NF type F	0 to 3 l/min	12x125	without connector
Selectaflo HP O_2 7 L NF 12X125	CM085200	O_2	NF type F	0 to 7 l/min	12x125	without connector
Selectaflo HP O_2 15 L NF 12X125	CM085300	O_2	NF type F	0 to 15 l/min	12x125	without connector
Selectaflo HP O_2 3 L NF 12X125	CM085400	O_2	NF type F	0 to 3 l/min	12x 125	with connector NF 4.5 bar
Selectaflo HP O_2 7 L NF 12X125	CM085500	O_2	NF type F	0 to 7 l/min	12x125	with connector NF 4.5 bar
Selectaflo HP O_2 15 L NF 12X125	CM085600	O_2	NF type F	0 to 15 l/min	12x125	with connector NF 4.5 bar
Selectaflo HP O_2 3 L NF 9/16	CM088700	O_2	NF type F	0 to 3 l/min	9/16	without connector
Selectaflo HP O_2 7 L NF 9/16	CM088800	O_2	NF type F	0 to 7 l/min	9/16	without connector
Selectaflo HP O_2 15 L NF 9/16	CM088900	O_2	NF type F	0 to 15 l/min	9/16	without connector
Selectaflo HP O_2 15 L NF 9/16	CM089200	O_2	NF type F	0 to 15 l/min	9/16	with connector NF 4.5 bar
Selectaflo HP O_2 7 L NFL 12X125	CM090600	O_2	NF type F extended	0 to 7 l/min	12x125	without connector
Selectaflo HP O_2 15 L NFL12X125	CM090700	O_2	NF type F extended	0 to 15 l/min	12x125	without connector
Selectaflo HP O_2 7 L NFL 9/16	CM090900	O_2	NF type F extended	0 to 7 l/min	9/16	without connector
Selectaflo HP O_2 15 L NFL 9/16	CM091000	O_2	NF type F extended	0 to 15 l/min	9/16	without connector
Selectaflo HP O_2 3 L NF Medium	CM091500	O_2	NF type F medium	0 to 3 l/min	12x125	without connector
Selectaflo HP O_2 7 L NF Medium	CM091600	O_2	NF type F medium	0 to 7 l/min	12x125	without connector
Selectaflo HP O_2 15 L NF Medium	CM091700	O_2	NF type F medium	0 to 15 l/min	12x125	without connector
Selectaflo HP O_2 15 L NF Medium DIN	CM094000	O_2	NF type F medium	0 to 15 l/min	9/16	with connector DIN 4.5 bar
Selectaflo HP O_2 15 L DIN 9/16	CM089500	O_2	DIN	0 to 15 l/min	9/16	with connector DIN 4.5 bar
Selectaflo HP O_2 3 L DIN 9/16	CM089600	O_2	DIN	0 to 3 l/min	9/16	without connector
Selectaflo HP O_2 7 L DIN 9/16	CM089700	O_2	DIN	0 to 7 l/min	9/16	without connector
Selectaflo HP O_2 15 L DIN 9/16	CM089800	O_2	DIN	0 to 15 l/min	9/16	without connector

Note: inlet connector length:
- NF type F and NF type D = 43 mm
- NF type F medium = 58 mm
- NF type F extended = 80.5 mm

Expertise in high-pressure devices

Usage assembly for Selectaflo HP O_2 and humidifier

Selectaflo HP $0_2/N_2O$

Other medical gases

Designation	Reference	Gas	Inlet connector	Flowrate range	Output nozzle	Low pressure outlet
Selectaflo HP Air 3 L NF 9/16	CM085700	Air	NF type D	0 to 3 l/min	9/16	without connector
Selectaflo HP Air 7 L NF 9/16	CM085800	Air	NF type D	0 to 7 l/min	9/16	without connector
Selectaflo HP Air 15 L NF 9/16	CM085900	Air	NF type D	0 to 15 l/min	9/16	without connector
Selectaflo HP Air 3 L NF 12X125	CM086000	Air	NF type D	0 to 3 l/min	12x125	with connector NF 4.5 bar
Selectaflo HP Air 7 L NF 12X125	CM086100	Air	NF type D	0 to 7 l/min	12x125	with connector NF 4.5 bar
Selectaflo HP Air 15 L NF12X125	CM086200	Air	NF type D	0 to 15 l/min	12x125	with connector NF 4.5 bar
Selectaflo HP Air 15 L C6 NF	CM092600	Air	NF type C6	0 to 15 l/min	9/16	with connector NF 4.5 bar
Selectaflo HP Air 15 L C6 DIN	CM094100	Air	NF type C6	0 to 15 l/min	9/16	with connector DIN 4.5 bar
Selectaflo HP $0_2/N_2O$ 15 L NFM	CM095000	O_2/N_2O	NF type L	0 to 15 l/min	12x125	with connector NF 4.5 bar

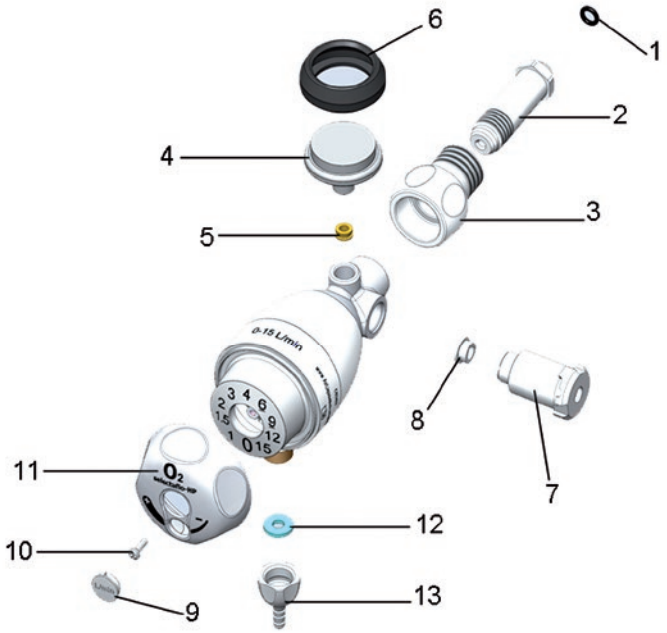
Accessories and consumables

Désignation	Reference
Adapter male 9/16 female 12x125	KY383800
Output nozzle M12x125 with seal (x10)	CY008400
Output nozzle 9/16 with seal (x10)	CY008300
TR200 PC Humidifier 12x125	KP121100
TR200 PC Humidifier 9/16	KP121200
Aspal suction for NF outlet	CK012100

Adapter male 9/16 female 12x125: customize a 12x125 outlet in a 9/16 outlet

Selectaflo HP O_2 with Aspal suction

Expertise in high-pressure devices



Spare parts

Designation	Reference	Repère
NF inlet connector seal (x 10)	YJ040600	1
NF medium O_2 inlet connector	CA090101	2
NF O_2 inlet connector	CX108500	2
NF O_2 extended inlet connector	CX112100	2
O_2 NF nut	CX109100	3
NF Air inlet connector	CX108400	2
Air NF nut	CX109000	3
DIN inlet connector R10 seal (x 10)	YJ069000	1
DIN O_2 inlet connector	CA090800	2
O_2 DIN nut	CX083000	3
Pressure gauge	CX105100	4
Pressure gauge cover (x 5)	CM078000	6
Pressure gauge diabolo seal (x 20)	CX079200	5
NF O_2 LP outlet	CK023501	7
NF Air LP outlet + shoulder seal	CK062100	7 + 8
NF O_2/N_2O LP outlet + shoulder seal	CK028600	7 + 8
DIN O_2 LP outlet + shoulder seal	BE060100	7 + 8
DIN Air LP outlet + shoulder seal	BE060800	7 + 8
O_2 adjustment knob + cover	CX013200	9 + 10 + 11
Air adjustment knob + cover	CX013300	9 + 10 + 11
Nozzle seal M12x125 (x10)	YJ041400	12
9/16 nozzle flat seal (x10)	KP070900	12
Output nozzle M12x125 with seal (x10)	CY008400	12 + 13
Output nozzle 9/16 with seal (x10)	CY008300	12 + 13

Note: inlet connector length (item n°11):
- NF type F and NF type D = 43 mm
- NF type F medium = 58 mm
- NF type F extended = 80.5 mm

Disassembly, assembly and curative maintenance must be carried out by trained technicians.
Use original spare parts.

Preci fixed pressure reducer

Preci is a high pressure reducer with fixed pressure reduction designed to be fitted to a high-pressure medical gas cylinder so as to supply a ventilator or any other medical device. It guarantees the delivery of the desired flowrate to the patient, regardless of the upstream pressure. Used by hospital and medical personnel, it combines sturdiness and ease of use.

Pressure gauge with rubber protection

Sturdy
- Pressure gauge protected
- Nickel-plated brass body

Easy to handle
- Highly-compact and light
- Fast and simple installation

Safe
- Responsive and precise integrated valve
- Thermal shield: limitation of risk of adiabatic compression
- High-pressure inlet connection filter

Unmatched level of safety
- More than 20 years of experience in high-pressure devices
- Components carefully selected (materials do not release toxic vapours in the event of fire, etc.)
- Easy traceability
- Lack of preventive maintenance with compulsory parts replacement

Preci

Available gases	O_2 - Medical air - N_2O
Supply pressure	200 bar maximum
Inlet connector	NF E 29-650 - DIN 477 - BS 341
Outlet connector	NF S 90-116 - DIN 13260 - BS 5682
Output pressure	4.5 bar
Weight	546 g (with AFNOR outlet)
Magnetic mass	7 g
Dimensions	118 (L) x 36 (Ø) x 63 (H) mm
Materials	Brass - EPDM
Lifetime	10 years
Cleaning	with a slightly damp cloth, disinfection with a solution carrying the CE marked (Hexanios G+R type)
Regulatory compliance	Class IIb medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use, ISO 10524-1

Expertise in high-pressure devices

Preci O_2 and Emboufix O_2

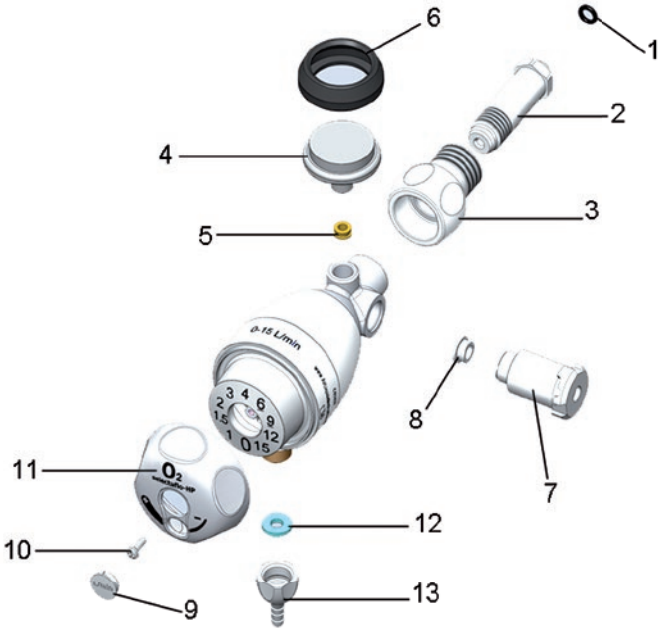
Preci DIN Air with DIN pressure outlet

Preci N_2O NF Medium with NF outlet

Preci NF O_2 with NF pressure outlet

References

Designation	Reference	Gas	Inlet connector
Preci O_2 NF	CB063500	O_2	NF type F
Preci Air NF	CB063600	Air	NF type D
Preci O_2 NF Medium	CB064600	O_2	NF type F medium
Preci O_2 NF Medium Sortie DIN	CB064300	O_2	NF type F medium
Preci Air NF type C6	CB064800	Air	NF type C6
Preci Air NF type C6 Sortie DIN	CB065000	Air	NF type C6
Preci N_2O NF Medium	CB063800	N_2O	NF type G medium
Preci N_2O NF Type B4	CB065100	N_2O	NF type B4
Preci O_2 DIN	CB064100	O_2	DIN
Preci Air DIN	CB064200	Air	DIN
Preci O_2 BS	CB064400	O_2	BS
Preci Air BS	CB064500	Air	BS
Preci O_2 BS prise NF allongée	CB064900	O_2	BS



Spare parts

Designation	Reference	Repere
NF inlet connector seal (x10)	YJ040600	1
NF O_2 inlet connector	CX108500	2
O_2 NF nut	CX109100	3
NF Air inlet connector	CX108400	2
Air NF nut	CX109000	3
DIN inlet connector R10 seal (x 10)	YJ069000	1
DIN O_2 inlet connector	CA090800	2
O_2 DIN nut	CX083000	3
Pressure gauge	CX105100	4
Pressure gauge cover (x 5)	CM078000	6
Pressure gauge diabolo seal (x 20)	CX079200	5
NF O_2 LP outlet + shoulder seal	CK023501	7
NF Air LP outlet + shoulder seal	CK062100	7 + 8
NF O_2/N_2O LP outlet + shoulder seal	CK028600	7 + 8
DIN O_2 LP outlet + shoulder seal	BE060100	7 + 8
DIN Air LP outlet + shoulder seal	BE060800	7 + 8

Disassembly, assembly and curative maintenance must be carried out by trained technicians.
Use original spare parts.

Pin-index reducer-flowmeter Domiflo

Domiflo is a pin-index pressure regulator-flowmeter with calibrated orifices designed for patients with respiratory failures. It is designed to be fitted to high-pressure medical oxygen cylinders with a Pin-Index yoke inlet valve. Compact and light, it is ideal for mobility and provides day-to-day patient autonomy.

Unmatched level of safety

- More than 20 years of experience in high-pressure devices
- Parts carefully selected (sealed pressure gauge, anti-UV plastic, etc.)
- Easy traceability
- Minimal maintenance

Functional design

- Natural grip
- Weight-optimised
- Reduced size: match the cylinder's circumference
- Easy cleaning

Intuitive use

- Direct and simple assembly
- Smooth locking system
- Easy selection and reading of flow rates

Reassuring robustness

- Shock resistant
- Reactive and precise integrated valve
- ABS housing

Domiflo

Available Gas	O_2
Supply pressure	200 bar maximum
Flowrates scales (L/min)	0 - 1 - 1.5 - 2 - 2.5 - 3 - 6 - **7** 0 - 1.5 - 3 - 5 - 7 - 9 - 12 - **15**
Flowrates accuracy	± 30% of the value read, up to 1.5 l/min ± 20% of the value read after 1.5 l/min
Inlet connection	Pin-Index EN ISO 407
Outlet nozzle	Fixed
Weight	480 g
Magnetic mass	29 g
Dimensions	110 (L) x 60 (H) x 92 (l) mm
Materials	Brass - EPDM - ABS - Silicone - Zamak
Lifetime	5 years
Cleaning	with a slightly damp cloth, disinfection with a solution carrying the CEmarked (Hexanios G+R type)
Regulatory compliance	Class IIb medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use EN ISO 10524-1, ISO 407

Making every day life easier

Domiflo O_2 0-15L

Domiflo O_2 0-7L

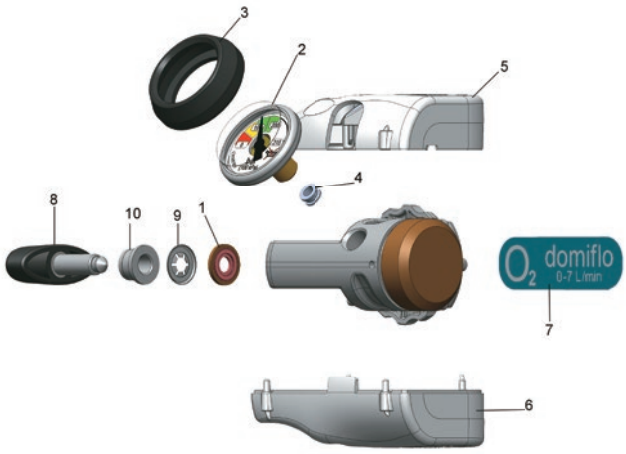
Domiflo from above

References

Reference	Designation	Gas	Inlet connection	Flowrates range
CM076000	Domiflo O_2 0-7L/min Pin-Index	O_2	Yoke	0 to 7 l/min
CM095600	Domiflo O_2 0-15L/min Pin-Index	O_2	Yoke	0 to 15 l/min

Spare parts

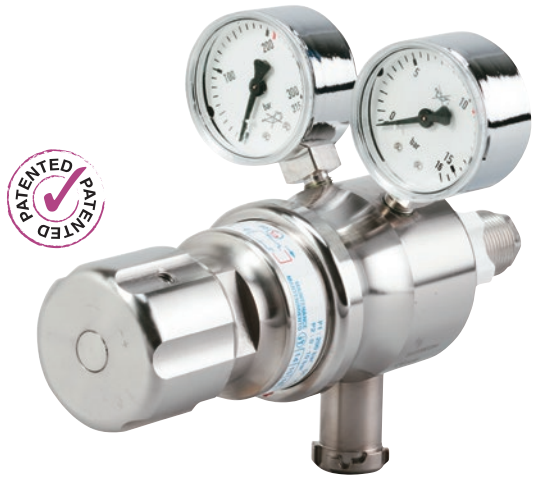
Reference	Designation	Repere
YJ041300	Bodock seal, pink (x10)	1
CX1051f00	Pressure gauge D36	2
CM078000	Pressure gauge cover (x 5)	3
CX079200	Pressure gauge diabolo seal (x 20)	4
CY011500 Pressure gauge kit Domiflo 7L/15L	Pressure gauge D36	2
	Pressure gauge cover (x 5)	4
	Pressure gauge diabolo seal (x 20)	3
	Upper housing	5
	Lower housing	6
	Domiflo 7L label	7
	Domiflo 15L label	7
CY011600 Clamping screw kit	Clamping screw	8
	«Starlock» retainer ring	9
	Fitting ring	10



The disassembly, assembly and curative maintenance operations must be carried out by trained technicians. Use original spare parts.

PROTAL II pressure reducer

Protal II is a high-pressure pressure reducer with adjustable pressure delivering a high flow from a medical gas cylinder. It is designed to supply emergency medical gas networks and to ensure secure maintenance operations.



Safe

- Reactive, integrated and accurate valve
- Decreased risks of adiabatic compression due to its thermal shield
- Filter in high-pressure connector inlet

Sturdy

- Adjustable operating pressure between 0 and 10 bar
- Design limiting the risks of icing for liquefied gases N_2O and CO_2 with high flow

Reliable over time

- Limited number of components
- Long lifetime
- Curved chrome-plated brass to facilitate cleaning

Secure network maintenance operations

- Supplies high flow up to 25 m^3 / h (+ / -420 l / min)
- Secure Setting: handwheel can be locked and sealed after adjustmentof the operating pressure

Protal II

Available gases	Oxygen - Medical air - Engine air - Nitrogen - CO_2 - N_2O
Supply pressure	200 bar maximum
Output socket	Setting pressure at 0 to 10 bar Flow of 25 m^3/h (200 bar in the cylinder, 10 bar at output).
Reading scales	0 to 16 bar
Weight	2.5 kg
Wall socket NF size	211 mm x Ø 105 mm
Dimensions	210 mm (L) x 115 mm (l) x 145 mm (H)
Working temperatures	-20 °C to + 60 °C
Materials	Brass
Cleaning	Soapy water, rinse with clear water. Do not use abrasives. Disinfection (if needed) CE marked (type Hexanios G+ R) solution
Maintenance	Replace the maintenance kit every 5 years
Lifetime	15 years
Regulatory compliance	Class IIb medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use EN ISO 10524-1

Network maintenance reference

Step 1: Adjusting

Step 2 : Locking

Step 3 : Sealing

References

Type	Designation	Reference	Gas	Inlet connector	Output outlet
	Protal II	CD080100	O_2	NF Type F	NF
	Protal II	CD080200	Air	NF Type D	NF
NF	Protal II	CD080300	N_2	NF Type C	NF
	Protal II	CD080400	CO_2	NF Type C	NF
	Protal II	CD080500	N_2O	NF Type G	NF

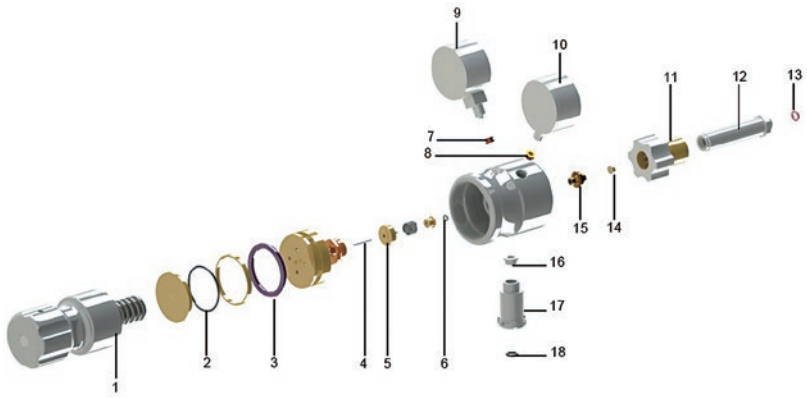
Spare parts

Reference	Designation	Repere
	Trigger spring	1
	Toric seal 36.3 x 2	2
	Toric seal R28	3
	Piston stick	4
CY008600 Maintenance kit 5 years Protal II	Valve HP	5
	Seal 2.9 x 1.78	6
	Toric seal R5 pink silicone	13
	Bronze filter	14
	Diffuser*	15
	Nylon shoulder seal	16
	Toric seal 6.5 x 2	18

* *Need a change on the PROTAL II manufactured before September 2003 (Series Number lower at 0309XXXX)*

Spare parts

Designation	Reference	Repere
O ring R28 nitrile	YJ002800	3
Diabolo seal manometer (x 20)	CX079200	7 & 8
Manometer D50 16 bar	CX001600	9
Manometer D50 315 bar	CX001900	10
Inlet nut O_2 NF F type	CX060100	11
Inlet nut NF Medical air type D	CX089101	11
Inlet nut NF CO_2 or N_2 type C	CX089201	11
Inlet connector NF O_2 type F or N20 type G	CX087800	12
Inlet connector NF Medical air type D	CX088900	12
O ring R5 for inlet connector NF (x 10)	YJ040600	13
Bronze filter	CD050500	14
Low pressure outlet NF O_2	CK026300	17
Low pressure outlet NF Air	CK026400	17
Low pressure outlet NF N_2O	CK026500	17
O ring 6.5 x 2 nitrile	YJ010500	18
Maintenance label O_2 (x10)	YF151900	



Emboufix
low pressure hoses

Emboufix is a low pressure hose connector for medical gases. It safely supplies medical equipment from a standard connector or a gas cylinder.

Designed to last
- Highly resistant hose
- Crimped connectors
- Lifetime 10 years

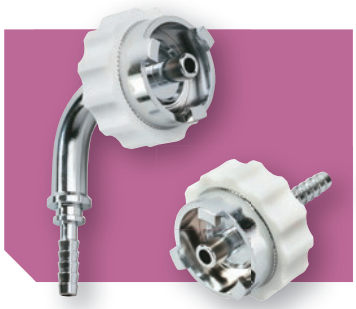
Resistant
- Lifetime of 10 years
- Anti-static hose made of 3 layers: internal tube made of EPDM, adhered polyester reinforced fibers, EPDM gas colour coated
- High resistance to bursting, traction and crushing

Safe
- Rapid identification of gas by tube colour and the marking
- Factory crimped standard non-removable connector making it impossible to reverse hoses
- Guaranteed without latex and odorless

Emboufix

Available gases	O_2 - Medical air - N_2O
Length	1.5 m - 3 m - 5 m
Inside diameter	5 mm +/- 0.5 mm
Outside diameter	11.5 mm +/- 0.5 mm
Working pressure maximum	14 bar maximum
Bursting pressure at 23°C	>56 bar
Bursting pressure at 40°C	>40 bar
Working temperature	-10 °C to + 40 °C
Connector	AFNOR (NFS 90 116)
Magnetic mass	0.4 g
Materials	Chrome brass connector crimped - Inside and outside tubes EPDM
Lifetime	10 years
Cleaning	Soapy water, rinse with clear water. Do not use abrasives. Disinfection (if needed) CE marked (type Hexanios G+ R) solution
Regulatory compliance	Class IIa medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use, EN ISO 5359

Essential elements



O_2 connectors

Medical air connectors

Vacuum connectors

References NF

Designation	Reference	Gas
Emboufix 1.5 m	BF030600	O_2
Emboufix 3 m	BF030200	O_2
Emboufix 5 m	BF030000	O_2
Emboufix 1.5 m	BF030800	Medical air
Emboufix 3 m	BF030500	Medical air
Emboufix 5 m	BF030400	Medical air
Emboufix 1.5 m	BF030700	N_2O
Emboufix 3 m	BF030300	N_2O
Emboufix 5 m	BF030100	N_2O

Accessories - Connectors

Designation	Reference	Gas	Ø Hose
Straight connector	BF005300	O_2	5 x 11
Straight connector	BF005100	Medical air	5 x 11
Straight connector	BF005200	N_2	5 x11
Straight connector	BF005700	N_2O	5 x 11
Straight connector	BF006300	$O_2 + N_2O$	5 x11
Straight connector	BF066800	CO_2	5 x 11
Straight connector	BF005800	Vide	6 x 10
Straight connector	BF025400	Air-800	5 x 11
Set square connector	BF015300	O_2	5x 11
Set square connector	BF015100	Medical air	5 x 11
Set square connector	BF015200	N_2	5 x11
Set square connector	BF015700	N_2O	5 x11
Set square connector	BF015600	$O_2 + N_2O$	5 x 11
Set square connector	BF016600	CO_2	5 x 11
Set square connector	BF015800	Vide	6 x 10
Set square connector	BF025500	Air-800	5 x 11

NF Connectors

Materials	Chrome-plated crimped brassconnector, polypropylene operating ring
Standards	All gases (expect Air 800) NFS 90-116 Air 800: FDS 90-11

Accessories - Rubber Hose EN 5359

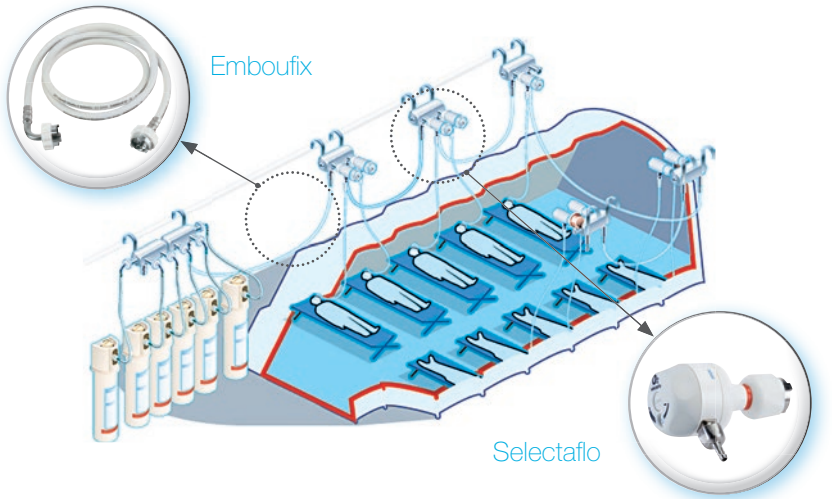
Designation	Reference	Gas	Ø Hose
Rubber hose x 20 m	YB013200	O_2	5 x 11
Rubber hose x 20 m	YB013300	Air	5 x 11
Rubber hose x 20 m	YB013400	N_2	5 x 11
Rubber hose x 20 m	YB013500	N_2O	5 x 11

3 Emergency

Emergency ramp 36

Emergency ramp

The emergency ramp provides the oxygenation solution suitable for a huge inflow of victims.
It is designed to constitute a mobile network for oxygen distribution that can be removed and transported to forward medical stations.



Performance

- High capacity for care, oxygen flow ensured for 10 patients simultaneously
- High autonomy, up to 6 cylinders can be connected
- Flow adjustable from 1 to 15 l / min

Reliable

- Flowmeters with integrated pressure reduction: Selectaflo
- Pressure control pressure gauge
- Non-corrosive composition

Easy installation

- Screw-less assembly: clip-on
- Transportable / Disassembly

Kit Composition

- 1 supply manifold for 6 cylinders
- 6 Emboufix low pressure hoses for the connection
- 4 mini manifold with 2 x O_2 NF gas outlets
- 1 mini manifold with 2 x O_2 NF gas outlets and 1 pressure gauge
- 5 x 3 m low pressure O_2 hoses to link with the mini manifolds
- 1 x 6 m low pressure O_2 hose to link with the mini manifolds
- 10 x Selectaflo O_2 0-15 l/min flowmeters to be installed on each gas outlet

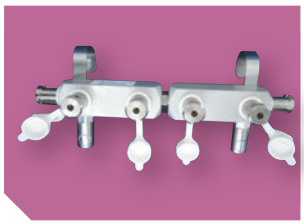
Features

Available gas	O_2
Supplying	3.5 à 5 bar, 150 l/min minimum
Minimum outlet pressure	3.5 bar (on each terminal unit)
Outlet flowrate	120 l/min maximum on one terminal unit 150 l/min maximum on 10 terminal units, on the whole
Flowmeter characteristics	Selectaflo NF 0-15 L/min ; 0 - 1 - 1.5 - 2 - 3 - 4 - 6 - 9 - 12 - 15
Storage temperature	-20 °C to +60 °C
Using temperature	0 °C to +40 °C
Dimensions (mm) and weight	O2 supply manifold, 6 cylinders: 320 (L) x 126 (H) x 118 (P) ; 2 Kg O2 mini manifold, 2 outlets: 149 (L) x 126 (H) x 118 (P) ; 1 Kg O2 mini manifold, 2 outlets 1 gauge: 164 (L) x 126 (H) x 118 (P) ; 1.2 Kg Emboufix : 3 m, 550 g - Low pressure hose for connection: 3 m, 550 g ; 6 m, 900 Selectaflo : 90 (L) x 56 (Ø) x 115 (H) mm, 295 g
Total weight	17.5 kg
Regulatory compliance	Class IIa medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use
Lifetime	10 years

For crisis management

Emboufix 3m

Selectaflo



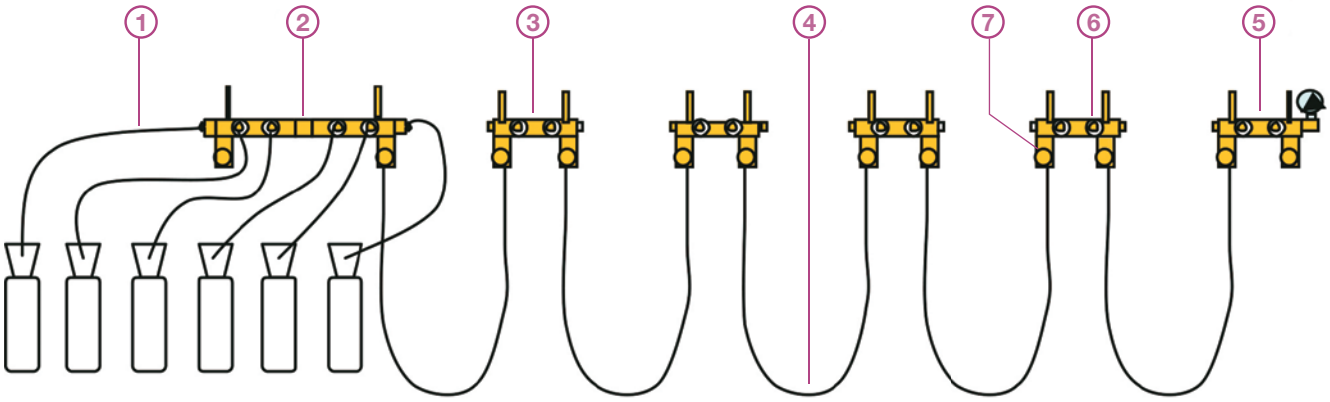
O_2 supply manifold, 6 cylinders

References

Designation	Reference	Gas	Inlet / output Connector
Emergency ramp	BB072300	O_2	NF

Spare parts

Designation	Reference	Repere
Emboufix O_2 3m	BF030200	1
O_2 supply manifold, 6 cylinders	BB072200	2
O_2 mini manifold, 2 outlets	BB072100	3
O_2 low pressure hose for connection (3 m)	BB072600	4
O_2 low pressure hose for connection (6 m)	BB072700	4
O_2 mini manifold, 2 outlets 1 gauge	BB072500	5
Serrated connector complete NF O_2	CK023500	6
O_2 security compact connector with seal	BY011400	7
Outlet cap with brace strip	KA002300	
Selectaflo O_2 0-15 l/min inlet NF	CM080300	



Disassembly, assembly and maintenance operations must be carried out by trained technicians.
Use original spare parts.
To comply with the accuracy of the flow rates, do not add items to an emergency plan ramp (limited to a maximum of 10 outlets).

4 Oxygen therapy devices for medical outlets

Flowmeters

Selectaflo 40
Flomed 42

Humidification

TR 200 44

Selectaflo
calibrated-orifice flow element

Selectaflo is a calibrated-orifice flowmeter with integrated pressure reduction. It enables medical staff to accurately and easily set the flow of gas being delivered to the patient.
Its ingenious design makes its operation intuitive.

Easy setting
Pre-set flow rate

Easy handling
Axis of rotation of 360°

Profiled outlet nozzle for easy and conducive handling

Clear
- Clear information
- Remote reading

Simple and intuitive
- Natural grip
- Set by turning clockwise
- Minimal maintenance

Soft and solid
- Smooth and professional finish
- Safe shaped nozzle
- Shock resistant
- Treated anti-UV housing

EASYCLIC NF inlet connector: connecting safely
- Handled with just one hand, solid and precise connection
- No risk of pinching fingers
- Robustness
- 360° outlet nozzle rotation

Selectaflo

Available gas	O_2 - Medical Air
Supply pressure	3.6 à 6 bar
Flowrates scales (L/min)	0 - 0.25 - 0.5 - 0.75 - 1 - 1.25 - 1.5 - 2 - 2.5 - **3** 0 - 0.5 - 1 - 1.5 - 2 - 2.5 - 3 - 4 - 5 - **7** 0 - 1 - 1.5 - 2 - 3 - 4 - 6 - 9 - 12 - **15**
Flowrates accuracy	± 30% of the value read, up to 1.5 l/min
	± 20% of the value read after 1.5 l/min
Inlet connection	NF - DIN - BS
Outlet nozzle	M12x125 ou 9/16''
Weight	295 g
Magnetic mass	4.1 g
Dimensions	90 (L) x 56 (Ø) x 115 (H) mm
Materials	Brass - EPDM - ABS
Lifetime	10 years
Cleaning	With a slightly damp cloth, disinfection with a solution carrying the CE marked Amphospray, Aniospray 41 ou Wip'anios (Anios)
Regulatory compliance	Class IIa medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use EN ISO 10524-4

Making medical procedures easier

Selectaflo O_2
0-3L NF

Selectaflo O_2 0-15L DIN

Selectaflo Air
0-15L BS

References

Designation	Reference	Gas	Inlet connector	Flowrate range	Output nozzle
Selectaflo O_2 0-3L NF 12x125	CM080100	O_2	NF	0 to 3 L/min	12x125
Selectaflo O_2 0-7L NF 12x125	CM080200	O_2	NF	0 to 7 L/min	12x125
Selectaflo O_2 0-15L NF 12x125	CM080300	O_2	NF	0 to 15 L/min	12x125
Selectaflo Air 0-3L NF 12x125	CM080400	Air	NF	0 to 3 L/min	12x125
Selectaflo Air 0-7L NF 12x125	CM080500	Air	NF	0 to 7 L/min	12x125
Selectaflo Air 0-15L NF 12x125	CM080600	Air	NF	0 to 15 L/min	12x125
Selectaflo O_2 0-3L NF 9/16	CM082500	O_2	NF	0 to 3 L/min	9/16
Selectaflo O_2 0-7L NF 9/16	CM082600	O_2	NF	0 to 7 L/min	9/16
Selectaflo O_2 0-15L NF 9/16	CM082700	O_2	NF	0 to 15 L/min	9/16
Selectaflo Air 0-3L NF 9/16	CM082800	Air	NF	0 to 3 L/min	9/16
Selectaflo Air 0-7L NF 9/16	CM082900	Air	NF	0 to 7 L/min	9/16
Selectaflo Air 0-15L NF 9/16	CM083000	Air	NF	0 to 15 L/min	9/16
Selectaflo O_2 0-15L NF Rail	CM082100	O_2	NF Rail	0 to 15 L/min	12x125
Selectaflo Air 0-15L NF Rail	CM082400	Air	NF Rail	0 to 15 L/min	12x125
Selectaflo O_2 0-15L DIN 9/16	CM080900	O_2	DIN	0 to 15 L/min	9/16
Selectaflo Air 0-7L DIN 9/16	CM081100	Air	DIN	0 to 7 L/min	9/16
Selectaflo Air 0-15L DIN 9/16	CM081200	Air	DIN	0 to 15 L/min	9/16
Selectaflo O_2 0-15L BS 9/16	CM083900	O_2	BS	0 to 15 L/min	9/16
Selectaflo Air 0-15L BS 9/16	CM084200	Air	BS	0 to 7 L/min	9/16

Making medical procedures easier

Humidifier TR200

Two-way flow switch

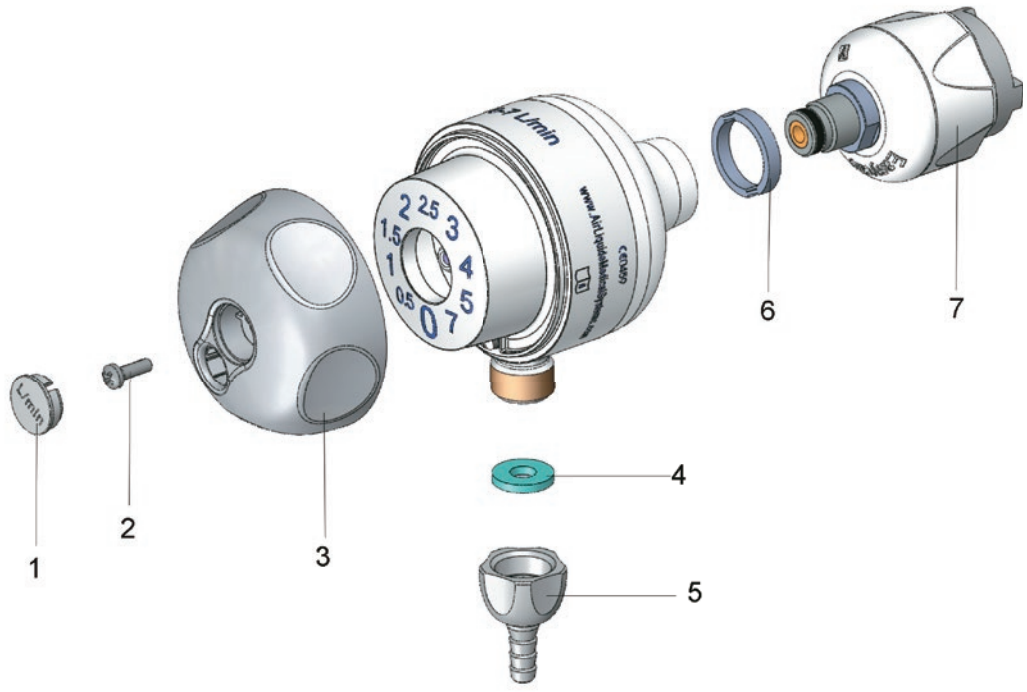
Air dual outlets

Accessories

Designation	Reference
TR200 PC Humidifier 12x125	KP121100
TR200 PC Humidifier 9/16	KP121200
Two-way flow switch 12x125	DG062800
Two-way flow switch 9/16	DG062900
Adapter male 9/16 female 12x125	KY383800
Output nozzle 12x125 with seal (x10)	CY008400
Output nozzle 9/16 with seal (x10)	CY008300
O_2 dual outlets	BE002800
Air dual outlets	BE003200
N_2O dual outlets	BE003100

Spare parts

Designation	Reference	Repère
O_2 adjustment knob + cover	CX014900	1 + 2 + 3
Air adjustment knob + cover	CX015000	1 + 2 + 3
Easyclic NF O_2 connector	BJ030200	6 + 7
Easyclic NF Air connector	BJ030100	6 + 7
Nozzle seal M12x125 (x10)	YJ041400	4
9/16 nozzle flat seal (x10)	KP070900	4
Output nozzle 12x125 with seal (x10)	CY008400	5
Output nozzle 9/16 with seal (x10)	CX109600	5



The disassembly, assembly and curative maintenance operations must be carried out by trained technicians.
Use original spare parts.

Flomed ball flowmeter

Flomed is a ball-type flowmeter (rotameter), designed to deliver gas from a low-pressure medical outlet: wall mounted or reducer output.
Flomed can be offered in a wide range of connection standards and flowrate scales in order to be used in a variety of applications.

A wide range to cover all oxygen therapy requirements

Easy and simple

- Control knob for direct and precise flow setting
- Clear graduated scale over full height of tube
- Marks and colour codes for identifying the gas

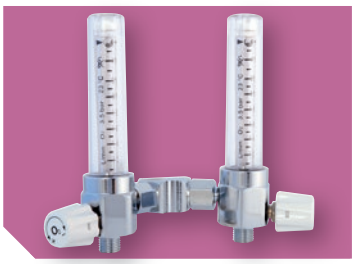
Sturdy and versatile

- Chrome-plated brass flowmeter body
- Versions for direct connection to wall terminal units, rail unit, single or twin construction

Flomed

Available gases	O_2 - Medical air (other upon request)
Maximum supply pressure	6 bar (recommended for 4.5 bar network pressure)
Inlet connector	NF - DIN - BS (other upon request)
Flowrates accuracy	+/- 10% read value or +/- 0.5 l/min if greater
Flowrates scales	0 - 1 / 0 - 5 / 0 - 15 l/min (other upon request)
Outlet nozzle	M12 x 125 or 9/16''
Dimensions	h 135 x L 30 x p 80 mm
Weight	274 g (NF)
Material	Brass - Polycarbonate
Cleaning	With a slightly damp cloth, use an alcohol-based solution or a solution carrying a CE mark
Regulatory compliance	Class IIa medical device, CE 0546, distributed by Air Liquide Medical Systems S.A. Carefully read the user manual before use. EN ISO 15002

Simplicity for efficiency



Flomed O_2 double

TR200 humidifier

Air dual outlets

References

Designation	Reference	Gas	Inlet pressure	Inlet connector	Flowrate	Output nozzle
Flomed O_2 4.5B 0-1 L NF 12X125	DG811100	O_2	4.5 bar	NF	0 to 1 L/min	12 x 125
Flomed O_2 4.5B 0-5 L NF 12X125	DG821100	O_2	4.5 bar	NF	0 to 5 L/min	12 x 125
Flomed O_2 4.5B 0-15 L NF 12X125	DG831100	O_2	4.5 bar	NF	0 to 15 L/min	12 x 125
Flomed air 4.5B 0-5 L NF 12X125	DG921100	Air	4.5 bar	NF	0 to 5 L/min	12 x 125
Flomed air 4.5B 0-15 L NF 12X125	DG931100	Air	4.5 bar	NF	0 to 15 L/min	12 x 125
Flomed O_2 4.5B 0-15 L NF 9/16	DG831200	O_2	4.5 bar	NF	0 to 15 L/min	9/16
Flomed air 4.5B 0-15 L NF 9/16	DG931200	Air	4.5 bar	NF	0 to 15 L/min	9/16
Flomed O_2 4.5B 0-15 L DIN 9/16	DG832200	O_2	4.5 bar	DIN	0 to 15 L/min	9/16
Flomed air 4.5B 0-15 L DIN 9/16	DG932200	Air	4.5 bar	DIN	0 to 15 L/min	9/16
Flomed O_2 4.5B 0-15 L BS 9/16	DG833200	O_2	4.5 bar	BS	0 to 15 L/min	9/16
Flomed air 4.5B 0-15 L BS 9/16	DG933200	Air	4.5 bar	BS	0 to 15 L/min	9/16
Flomed O_2 4.5B 0-15 L DBLE	DG833600	O_2	4.5 bar	Twin BS	0 to 15 L/min	12 x 125

Accessories

Designation	Reference
TR200 PC humidifier 12X125	KP121100
TR200 PC humidifier 9/16	KP121200
Two-way flow switch 12x125	DG062800
Two-way flow switch 9/16	DG062900
O_2 dual outlets	BE002800
Air dual outlets	BE003200

TR200 Humidifier

The TR200 humidifier enables humidification by micro-oxigenation of the gases administered to the patient and thus improves their comfort during oxygen therapy. It can be easily fitted to flowmeters, concentrators or liquid oxygen tanks (at home).

Optimal humidification

Simplified use and maintenance

- Guaranted hygiene: sterilization in an autoclave at 121°C for 15 min
- Container easy to open and close
- Limited number of components
- Reduced size and weight

Performance

- Efficient humidification by micro-bubbling
- Solid design

TR200

Inner volumer	200 ml
Inlet connection	12 x 125 or 9/16"
Maximum flow value	20 l/min
Outlet connection	Hose Ø 6 to 9 mm
Weight	138 g
Dimensions	192 x 78 x Ø 60 mm
Material	Polycarbonate (bottle and lid) Chrome-plated brass (nipple)
Cleaning	Use soapy water, rinsing by clear water. Never use an abrasive cleaner. Disinfection, if needed, with an alcohol-based solution or CE marked solution
Regulatory compliance	Class IIa medical device, CE0546, distributed by Air Liquide Medical Systems S.A. Carefully read the user manual before use. EN ISO 8185

References

Designation	Reference
TR200 PC humidifier 12X125	KP121100
TR200 PC humidifier 9/16	KP121200

Accessories

Designation	Reference
Two-way flow switch 12x125	DG062800
Two-way flow switch 9/16	DG062900

5 Medical suction

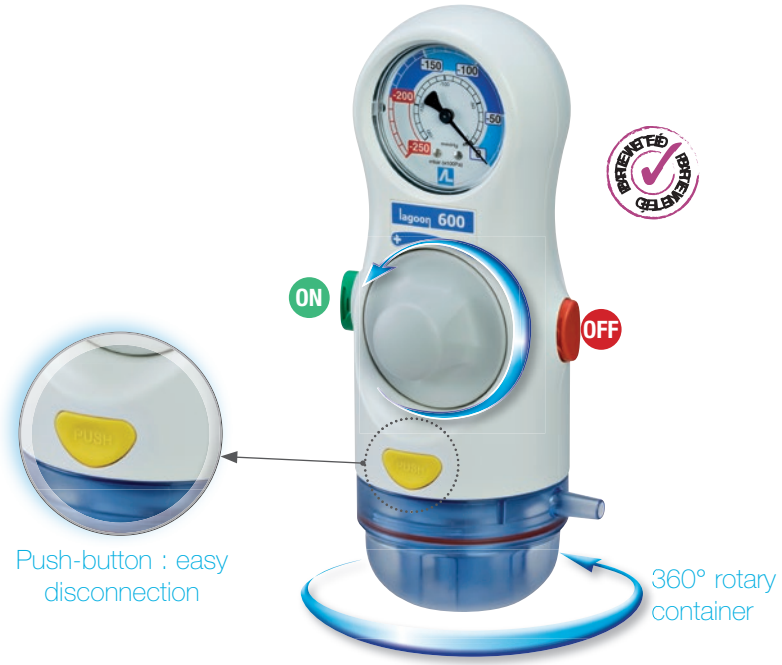
Lagoon 48

Reusable
collection containers 52

Flovac single-use
collection system 54

Lagoon vacuum regulator

Lagoon is a vacuum regulator that is used to accurately adjust suction from a medical outlet. It enables the discharge of patient fluids and secretions. Lagoon is designed to facilitate its use by medical teams and to enhance medical hygiene. This device is the essential element of the medical suction.



Optimum vacuum regulation

- Adjustable depression to -800 mbar
- Bacteriological filter and non-return valve
- Easy connection: Easyclic NF
- 360° rotary safety container

Efficient and safe

- Optimum protection of the vacuum network using the Lagoon bacteriological filter and non-return valve
- Elimination of tube twisting risks with the 360° rotary safety container
- Robust and sturdy design
- High depression to -800 mbar with an adjustable flow

Intuitive use

- Simplified connection: Easyclic NF
- Easy setting due to the twin scale mbar/mmHg gauge to implement protocols without errors
- The On/Off knob maintains the calibration
- The container connects in one movement and rotates 360° to follow the actions of the user

Modular

- Lagoon is offered with 4 ranges of suction in order to cover all medical suction requirements
- 3 types of container: for autoclave, cold disinfection or single-use depending on the protocol implemented in the building

Lagoon

Available gas	Medical vacuum
Flowrates scales (mbar/mmHg)	0 à -200 mbar = 0/-150 mmHg 0 à -500 mbar = 0/-375 mmHg 0 à -800 mbar = 0/-600 mmHg
Flow	20, 45 or 65 l/min following model
Max inlet depression	-950 mbar
Precision of vacuum gauge	2.5 % full scale
Dimensions	233 (H) x 105 (L) x 125 (P) mm
Weight	550 g
Storage temperature	-40 °C to +60 °C
Working temperature	-8 °C to +50 °C
Humidity of storage and operating	40% à 70%
Security valve	-240 mbar (for Lagoon™ 250 and 250 20L)
Cleaning	With soapy water and rinse with clear water. Disinfection with a strong solution EC Amphospray 41 Wip'anios or Anioxyde 1000 (Anios).
Maintenance	Autoclaving of the security autoclavable jar at 134 ° C (yellow jar) during 18 min. Do not use abrasive (powder or other) Do not immerse. Change bacteriological filter every 2-4 days depending on use and between each patient. No maintenance
Lifetime	10 years
Regulatory compliance	Class IIa medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Read carefully the user manual before use EN ISO 10079-3

Secure medical suction

Lagoon 250 20 L

Lagoon 250

Lagoon 600

Lagoon 1000

	Lagoon 250 20 L	Lagoon 250	Lagoon 600	Lagoon 1000
Application	Neonatology Paediatric use	Digestive suction	Pharyngeal and tracheal suction	Surgery
Max flow	20 l/min	45 l/min	65 l/min	65 l/min
Setting range	0 to -200 mbar	0 to -200 mbar	0 to -500 mbar	0 to -800 mbar

NF References

Designation	Reference	Safety container	Setting range	Flowrate	Gaz	Inlet connector
Lagoon 250 20 L	FB024100	Disinfected jar from cold	0-200 mbar	20 L/min	Vacuum	NF
Lagoon 250 20 L	FB023100	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	NF
Lagoon 250 20 L	FB022100	Single use container	0-200 mbar	20 L/min	Vacuum	NF
Lagoon 250 20 L	FB029100	Disinfected container from cold	0-200 mbar	20 L/min	Vacuum	NF and rail mounting
Lagoon 250 20 L	FB030100	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	NF and rail mounting
Lagoon 250 20 L	FB028100	Single use container	0-200 mbar	20 L/min	Vacuum	NF and rail mounting
Lagoon 250	FB023800	Disinfected container from cold	0-200 mbar	45 L/min	Vacuum	NF
Lagoon 250	FB022800	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	NF
Lagoon 250	FB021800	Single use container	0-200 mbar	45 L/min	Vacuum	NF
Lagoon 250	FB028800	Disinfected container from cold	0-200 mbar	40 L/min	Vacuum	NF and rail mounting
Lagoon 250	FB029800	Autoclavable at 134 °C	0-200 mbar	40 L/min	Vacuum	NF and rail mounting
Lagoon 250	FB027800	Single use container	0-200 mbar	45 L/min	Vacuum	NF and rail mounting
Lagoon 600	FB023900	Disinfected container from cold	0-200 mbar	65 L/min	Vacuum	NF
Lagoon 600	FB022900	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	NF
Lagoon 600	FB021900	Single use container	0-500 mbar	65 L/min	Vacuum	NF
Lagoon 600	FB028900	Disinfected container from cold	0-500 mbar	50 L/min	Vacuum	NF and rail mounting
Lagoon 600	FB029900	Autoclavable at 134 °C	0-500 mbar	50 L/min	Vacuum	NF and rail mounting
Lagoon 600	FB027900	Single use container	0-500 mbar	65 L/min	Vacuum	NF and rail mounting
Lagoon 1000	FB024000	Disinfected container from cold	0-800 mbar	65 L/min	Vacuum	NF
Lagoon 1000	FB023000	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	NF
Lagoon 1000	FB022000	Single use container	0-800 mbar	65 L/min	Vacuum	NF
Lagoon 1000	FB029000	Disinfected container from cold	0-800 mbar	50 L/min	Vacuum	NF and rail mounting
Lagoon 1000	FB030000	Autoclavable at 134 °C	0-800 mbar	50 L/min	Vacuum	NF and rail mounting
Lagoon 1000	FB028000	Single use container	0-800 mbar	65 L/min	Vacuum	NF and rail mounting

Secure medical suction

Other references

Standard	Designation	Reference	Safety container	Setting range	Flowrate	Gas	Inlet connector
DIN	Lagoon 250 20 l	FB025100	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	DIN
	Lagoon 250	FB024800	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	DIN
	Lagoon 600	FB024900	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	DIN
	Lagoon 1000	FB025000	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	DIN
	Lagoon 250	FB023500	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	DIN and rail mounting
	Lagoon 250	FB023200	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	DIN and rail mounting
	Lagoon 600	FB023300	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	DIN and rail mounting
	Lagoon 1000	FB023400	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	DIN and rail mounting
BS	Lagoon 250 20 l	FB026100	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	BS
	Lagoon 250	FB025800	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	BS
	Lagoon 600	FB025900	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	BS
	Lagoon 1000	FB026000	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	BS
CM Spain	Lagoon 250 20 l	FB027100	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	CM
	Lagoon 250	FB026800	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	CM
	Lagoon 600	FB026900	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	CM
	Lagoon 1000	FB027000	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	CM
Brazil	Lagoon 250 20 l	FB025500	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	NBR
	Lagoon 250	FB025200	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	NBR
	Lagoon 600	FB025300	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	NBR
	Lagoon 1000	FB025400	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	NBR
	Lagoon 250	FB024500	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	NF
	Lagoon 250	FB024200	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	NF
	Lagoon 600	FB024300	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	NF
	Lagoon 1000	FB024400	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	NF
UNI Italy	Lagoon 250 20 l	FB022500	Autoclavable at 134 °C	0-200 mbar	20 L/min	Vacuum	UNI
	Lagoon 250	FB022200	Autoclavable at 134 °C	0-200 mbar	45 L/min	Vacuum	UNI
	Lagoon 600	FB022900	Autoclavable at 134 °C	0-500 mbar	65 L/min	Vacuum	UNI
	Lagoon 1000	FB022400	Autoclavable at 134 °C	0-800 mbar	65 L/min	Vacuum	UNI

Cold disinfected container
Lifetime: 30 cycles

Container: Autoclavable at 134°C for 18 min.
Lifetime: 30 cycles

Single use container to be replaced every 2 to 4 days and systematically between each patient

Accessories and consumables

Designation	Reference	Repere
Cold disinfected container	FB077800	9
Container autoclavable at 134 °C	FB078000	9
Single use container (X50)	FB079000	9
Bacteriological filter (x100) for jar	FY000700	
Rail support NF	FB079100	
Security nozzle	FB072900	6
Plastic rail support	FA090200	

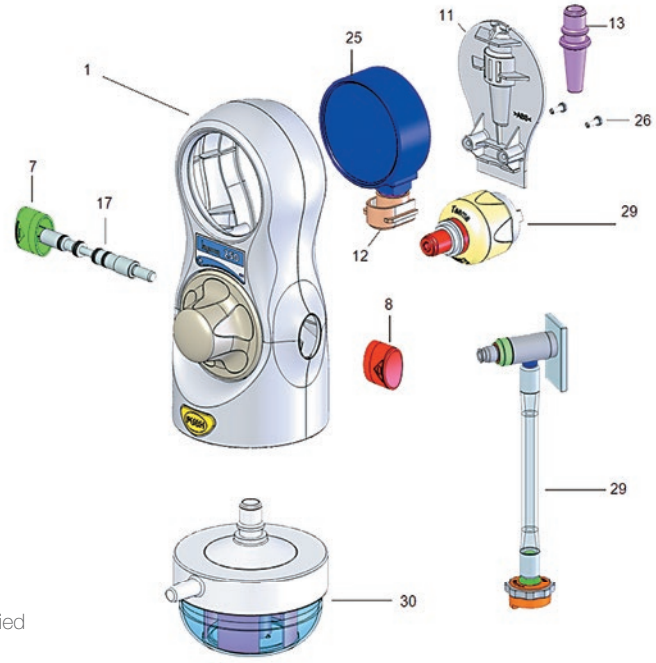
Suction trolley
(stand-alone)

Lagoon with accessories
for medical suction

2 Lagoon 600 NF mounted
on a dual vacuum outlets

Spare parts

Designation	Reference	Repere
Vacuum gauge Lagoon 250	FB074500	4
Vacuum gauge Lagoon 600	FB074400	4
Vacuum gauge Lagoon 1000	FB074300	4
Back trapdoor	FB072100	5
Whole on/off drawer	FB078900	1 + 2 + 3
Kit cold disinfected container (x10)	FB079900	
Kit container autoclavable at 134°C (x10)	FB080000	
Whole inlet connector Easyclic	BJ030000	7
Rail connector NF	FB079100	8
Inlet connector Easyclic Brazil	BJ030300	
Disassembly key	CY010200	
Vacuum dual outlets	BE002900	
Suction trolley (stand-alone)	FA091300	



The disassembly, assembly and curative maintenance operations must be carried out by trained technicians. Use original spare parts.

Reusable collection containers

The range of polycarbonate collection containers is designed to securely collect the secretions originating from medical suction.
Available in 3 formats, autoclavable and fitted with a non-return valve, the polycarbonate containers can adapt to all requirements associated with suction from a medical outlet.

Safe suction

- Pressure-fit lid (2 and 4 liter containers) or screw-top lid (1 litre container) guarantees excellent air-tightness
- Built-in non return valve in the cover eliminates the risk of polluting the vacuum network
- Polycarbonate non-breakable containers

Simple maintenance

- Polycarbonate containers and lids can be autoclaved at 121°C for 15 minutes
- Container delivered with two straight nipples and two elbow nipples to adapt to all configurations and to provide all possibilities of connection between the containers, the vacuum regulator and the patient

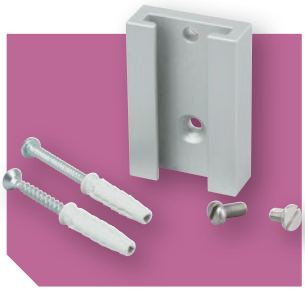
Polycarbonate collection containers

Volume	1 / 2 / 4 litres
Dimensions and weight	1 litre container: h 245 x Ø 108 mm – 375 g 2 litres container: h 298 x Ø 127 mm – 490 g 4 litres container: h 321 x Ø 175 mm – 985 g
Maximum suction value	-950 mbar (-95 kPa)
Vacuum connector	Ø 8 mm
« Vacuum » tube size	Min. Ø 6 x 12 mm (recommended Ø 8 x 14 mm ; L = 1.8 m max)
« Patient » tube size	Min. Ø 6 x 12 mm (recommended Ø 8 x 14 mm ; L = 2.5 m max)
Material	Polycarbonate
Lifetime	up to 30 sterilization cycles
Cleaning	Never use an abrasive cleaner. Disinfection, if needed, with an alcohol-based solution or CE marked solution Sterilization in an autoclave at 121°C for 15 minutes
Regulatory compliance	Class I medical device, CE 0546, distributed by Air Liquide Medical Systems S.A. Carefully read the user manual before use. EN ISO 10079-3

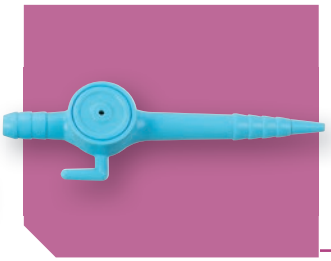
Making medical procedures easier

Plastic support ring

Support basket for 4 L container



Wall holder for support ring or basket



Disposable vacuum breaker

References

Designation	Rzfzrence	Characteristic
1 L polycarbonate container	FA064400	Screw-top lid
2 L polycarbonate container	FA090100	Pressure-fit lid
4 L polycarbonate container	FA062900	Pressure-fit lid
1 L polycarbonate container only	FA065800	
2 L polycarbonate container only	FA061500	
4 L polycarbonate container only	FA065900	
2 L polysulfone container only	VY299201	
Lid only for 1 L polycarbonate container	FA066000	
Lid only for 2 L polycarbonate container	FA065100	
Lid only for 4 L polycarbonate jar	FA066100	

Accessories & consumables

Designation	Reference	Characteristic (mm)
Plastic support ring for 1 L container	FA072100	25 x 5 hook
Plastic support ring for 2 L container	FA072200	25 x 5 hook
Support basket for 4 L container	FA064600	25 x 5 hook
Wall holder for support ring or basket	FA064700	25 x 5 hook
Rail holder for support ring or basket	FA065600	25 x 5 hook
Plastic support ring for 1 L container	FA090400	30 x 5 hook
Plastic support ring for 2 L container	FA090500	30 x 5 hook
Wall holder for support ring or basket	FA091400	30 x 5 hook
Monokit disposable container (x50)	FA064500	for 2 L jar
Autoclavable silicone tube, green	YB002210	Ø 6 x 12
Versilic® autoclavable silicone tube	YB002200	Ø 6 x 12
Versilic® autoclavable silicone tube	YB003500	Ø 8 x 14
Non autoclavable PVC tube	YB002000	Ø 6 x 12
Disposable vacuum breaker	FA065000	with paediatric adapter

**autoclavable at 134°C for 18 minutes*

Flovac single-use collection system

Flovac consists in combining a single-use bag with a reusable collection container. Available in 3 formats, Flovac is designed to guarantee efficient medical suction and the protection of equipment and the vacuum network. Flovac is also a particularly hygienic solution and is easy for medical staff to use.

Safe suction

- Single-use bag with a built-in hydrophobic shut off and antibacterial filter for optimum protection of vacuum network
- Overflow valve deactivating vacuum generation whenever the maximum filling limit is reached
- Butterfly connector to interrupt the suction

Optimum hygiene

- Bag hermetically sealed with the lid: safe use and handling
- Container can be autoclaved

Modularity

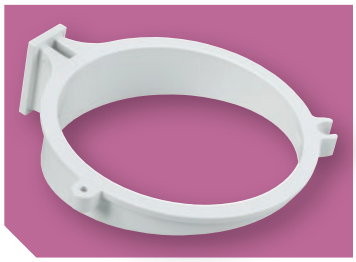
- Container supplied with two straight nipples for fluids containing bone fragments and two elbow nipples for flow reduction
- The containers can be coupled together to increase collection capacity, fixed to a rail or on a mobile trolley: can be adapted to all configurations

Flovac disposable collection system

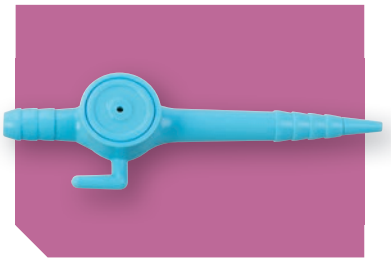
Volume	1 / 2 / 3 litres
Maximum supply depression	-950 mbar (-95 kPa)
Maximum flow value	42 L/min
Elbow connector	Ø 8.0 à 9.2 mm
Straight connector	Ø 14 à 15.5 mm
« Vacuum » tube	Min. Ø 6x12 mm (L = 1.8 m max)
« Patient » tube	Min. Ø 6x12 mm (conseillé Ø 8x14 mm ; L = 2.5 m max)
Material	Poches en polyéthylène - bocal en polypropylène
Filter characteristics	Membrane PTFE GORE-TEX™ Filtration efficiency >99.999995% with particle size of <0,1µ
Cleaning	With water and neutral detergents. Never use sovents or alcohol Sterilization in an autoclave at 121°C for 15 minutes
Regulatory compliance	Class IIa medical device, CE 0546, distributed by Air Liquide Medical Systems S.A. Carefully read the user manual before use. EN ISO 10079-3

Making medical procedures easier

Suction trolley
(stand-alone)



Plastic support ring



Disposable vacuum
breaker

References

Designation	Reference	Characteristic
1 L Flovac liner bag	FA091000	Single-use
1 L Flovac container	FA090600	Autoclavable
2 L Flovac liner bag	FA091100	Single-use
2 L Flovac container	FA090700	Autoclavable
3L Flovac liner bag	FA091200	Single-use
3 L Flovac container	FA090800	Autoclavable
Suction trolley with 5 wheels	FA091300	Trolley only, 30 x 5 mm hook

Accessories & consumables

Designation	Reference	Connection type (mm)
Support ring for Flovac jar	FA090800	30 x 5 hook
Wall holder for support ring or basket	FA091400	30 x 5 hook
Autoclavable silicone tube, green	YB002210	Ø 6 x 12
Versilic® autoclavable silicone tube	YB002200	Ø 6 x 12
Versilic® autoclavable silicone tube	YB003500	Ø 8 x 14
Non autoclavable PVC tube	YB002000	Ø 6 x 12
Disposable vacuum breaker	FA065000	with paediatric adapter

Glass collection container

Hygiene and simplified use.

Complete kit composed of (FA003800) :

- A 2 L glass container with sealed rubber lid
- Two stainless steel tubes
- A support that can be fixed to a rail or a wall or floor mounted
- An autoclavable silicon tube
- A disposable vacuum breaker

Characteristics

- Container autoclavable at 134 °C for 18 min (without lid)
- Volume 2 litres
- Dimensions and weight : h 270 mm x D 125 mm – 1060 g
- Class I medical device, CE 0459, manufactured by Air Liquide Medical Systems S.A. Carefully read the user manual. Compliance with standard EN ISO 10079-3.

References

Designation	Reference
Complete 2 L glass container with support	FA003800
Single 2 L glass container	FA062000
Black rubber lid without s/s tube	FA006300
130 mm L elbow s/s tube	FA063900
180 mm L elbow s/s tube	FA064000
Wall mounting pad	FA003500
Rail attachment	PE756100

6 Best practices

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Using a pressure reducer

Safely handling a pressure regulator flowmeter firstly requires compliance with a usage protocol that includes the assembly and disassembly of the device.

During assembly

Safety

For this operation, stand on the opposite side of the pressure reducer

Clean hands with soap

Slightly open the valve to discharge dust and then close it immediately

Check the condition of the pressure regulator flowmeter seal
Connect the inlet of the pressure reducer to the cylinder valve
Hand tighten the pressure regulator flowmeter connector until it stops

Slowly and fully open the valve on the cylinder anti-clockwise, then close it by a 1/4 turn
Check for the absence of leaks

At the end of use, first close the valve on the cylinder, then the flow rate or pressure adjustment knob

During disassembly

Safety

Following each use, store the pressure reducer in a clean and dry location and apply the inlet connector protection cap.
Keep the cylinder closed when it is empty.

Close the valve on the cylinder

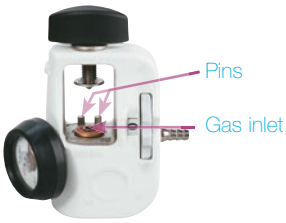
Disconnect the humidifier or Emboufix hose

Disconnect the tube from the inhalation apparatus and open the flow rate adjustment knob in order to purge the pressure reducer
Check that the pressure indicators read 0

Loosen the nut by hand
Remove the pressure reducer

Specific safety measures for assembling a yoke pressure reducer on a cylinder with a Pin-Index valve.

Pin-Index valve



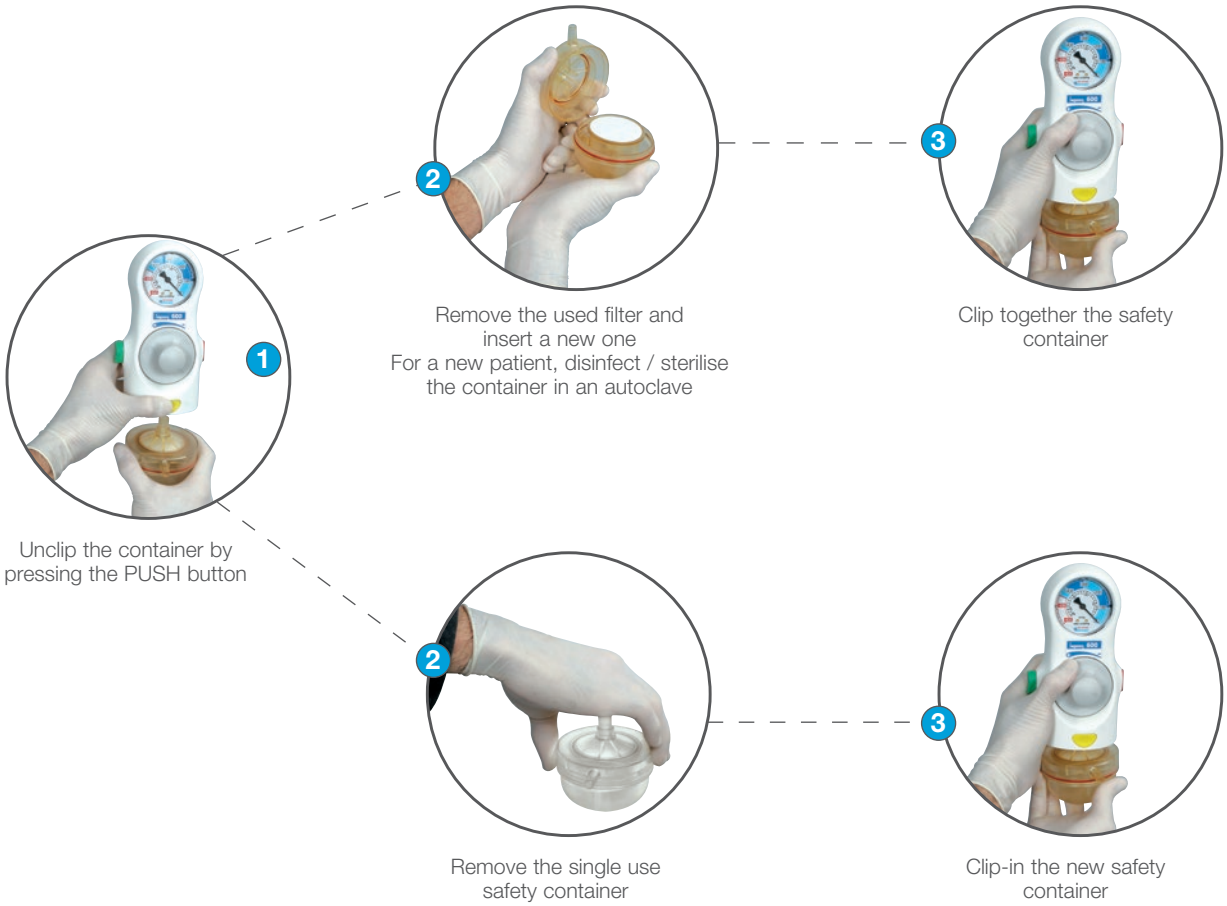
Yoke pressure regulator valve

- Insert the pressure reducer safety pins into the safety holes on the valve on the cylinder
- Match the gas outlet on the valve with the gas inlet on the pressure reducer
- Never force the connection
- In the event of a leak when opening the valve, close the valve and check that it is properly connected

Replacement of consumable items

Most medical devices require regular maintenance during use. In order to maintain the durability of the performance levels of their devices designed for humidification and vacuum control Air Liquide Medical Systems recommend the following maintenance operations

Changing the anti-bacterial filter on the Lagoon vacuum regulator



1. Unclip the container by pressing the PUSH button
2. Remove the used filter and insert a new one
   For a new patient, disinfect / sterilise the container in an autoclave
3. Clip together the safety container

2. Remove the single use safety container
3. Clip-in the new safety container

SAFETY

- Change the anti-bacterial filter every 2 to 4 days and systematically between each patient
- Autoclave sterilise the polysulphone safety container (yellow container) at 134°C for 18 min
- Cold disinfect (blue container)

General conditions of sales

GENERAL POINTS

Our sales are made under the following terms and conditions, except for the points that could cover different special terms expressly accepted in writing by Air Liquide Medical Systems.
Air Liquide Medical Systems is bound only by its written acceptance of the order.
The prices considered by Air Liquide Medical Systems, in the absence of special supply agreements, are those that figure in the price list in force on the day of the sale; they are quoted excluding taxes, Taxes applicable on the delivery date will be added to the amount of the invoices. Any modification of the plan of taxes and duties that directly or indirectly affects Air Liquide Medical Systems products will entail a corresponding modification of the invoicing. In case of non-payment on scheduled due dates (general and special terms), the legal interest rates in force, increased by 4 points will be added to the amount of the unpaid invoices. The prices and information mentioned in the catalogues, brochures and price lists are not binding on Air Liquide Medical Systems which reserves the right to make changes to them.
In case estimates are established, the supply will comprise exactly and solely the equipment specified on the estimate. For additional supplies, a new contract will be signed, with terms and conditions that cannot change those of the initial order.
For any low-value order, Air Liquide Medical Systems reserves the right to include a part of the administrative charges in the invoice.

PAYMENT TERMS AND CONDITIONS

Payment is due in advance by swift transfer or at sight, by irrevocable Letter of Credit confirmed by a French Bank, unless different special terms expressly accepted in writing by Air Liquide Medical Systems.
Any invoice issued by Air Liquide Medical Systems shall be paid directly by your company through a financial institution located in your country.

STUDIES AND PROJECTS

Studies and documents of any kind remitted or sent by Air Liquide Medical Systems always remain its entire property. These must be returned when asked by Air Liquide Medical Systems, which preserves the totality of the intellectual property of its projects, which cannot be communicated or executed without its prior written permission.

DELIVERY

Whatever the destination of the equipment and the conditions of the sale, the transfer of ownership and risks to the buyer is done in the factories or warehouses of Air Liquide Medical Systems subject to the provisions of the retention of title clause given later. Air Liquide Medical Systems is not responsible for a delivery fault or delay in the execution of the sale caused by a case of force majeure, strikes, epidemics, lock-out, manufacturing accidents, third part acts, third party faults, faults in essential supplies, etc., and generally, any event beyond its control. If the dispatch is delayed for a reason not attributable to Air Liquide Medical Systems, and if ALMS gives its consent, the equipment will be stored and handled, if necessary, at the costs and risks of the buyer. Air Liquide Medical Systems refuses any responsibility in this matter. These provisions in no way change the payment obligations for the supply and do not constitute any kind of substitution.
Except if expressly stipulated by Air Liquide Medical Systems in its confirmation of the order, the delivery schedules are given for information purposes. No penalty for delay in delivery can be claimed from Air Liquide Medical Systems. If the goods are delivered in successive deliveries, a fault in one delivery does not invalidate the contract for the other deliveries.
The formal acceptance of the goods by the buyer on receiving them abolishes any claim by him, unless he expresses his reservations by a registered letter within three days of the date of receiving mentioned, according to the terms of sale, either in the shipping notice or in the acknowledgement given to the transporters. The use of the goods that have been accepted by the buyer cannot give room for claims.
Should the case arise, the return of equipment requested by the buyer can be done only with prior permission from Air Liquide Medical Systems. The equipment must be restored in perfect condition, free of all duties. No port due will be accepted. A sum equal to 20% of the amount of the equipment (with a minimum of (50€ excl. tax)) plus restoration costs, if any, will be deducted as administrative and return inspection charges

TRANSPORT, CUSTOMS, INSURANCE, ETC.

All operations of transport, insurance, customs, handling, carried out on site, are charged to the buyer. In any case, Air Liquide Medical Systems does not guarantee the means of transport, even in the case of transport done according to the buyer's request. The dispatched goods are transported at the buyer's risk, as the transfer of ownership and risks takes place at the factories of Air Liquide Medical Systems subject to the provisions of the retention of title clause given later.
Transportation is done at the lowest rates, unless otherwise expressly requested by the buyer.

GUARANTEES

The normal guarantee period (except for special terms) of the equipment supplied by Air Liquide Medical Systems against all manufacturing or assembling defects – if the assembling is done by Air Liquide Medical Systems – is one year from the date of delivery. The period of this guarantee does not apply to consumable goods. In case of defective delivery, the responsibility of Air Liquide Medical Systems is strictly limited to the obligation to supply or repair, or replace the goods, as the case may be, free of any damages. Air Liquide Medical Systems repairs in its workshops or replaces free of charge, including labour costs, but free of transport and packing charges, all the parts it inspects and acknowledges as defective.
Or Air Liquide Medical Systems repairs on site or replaces free of charge, including labour costs, but free of travel and staying charges, all parts it inspects and acknowledges as defective.
With a view to fulfilling this guarantee, Air Liquide Medical Systems reserves the right to change the devices in place or to replace the said parts. The parts taken back as per the guarantee will be the property of Air Liquide Medical Systems. Any repair or replacement does not consequently extend the guarantee.

General conditions of sales

The guarantee does not apply to replacements or repairs that may arise from the normal wear and tear of appliances or deterioration or accidents caused by negligence, lack of supervision or faulty maintenance or use of these appliances.
Further, this guarantee will cease when the client carries out himself repairs or changes to the sold equipment. In the case of custom work, Air Liquide Medical Systems guarantees exclusively an execution in compliance with the order.
The transport costs of defective equipment or parts, as well as those of returning equipment or repaired or replaced parts, are charged to the buyer, as also, in case of repairs on the plant site, the travel and staying expenses of the employees or representatives of Air Liquide Medical Systems, in accordance with its rates in force at that time.
Air Liquide Medical Systems guarantees only that the equipment is suitable for the use defined in its accompanying documents consisting especially of the operating instructions, the delivery documents, the labels, the symbols, etc.
The user must strictly and necessarily comply with the laws, regulations and prescriptions in force concerning the use of the equipment sold by Air Liquide Medical Systems.

CLEANING AND STERILISATION OF EQUIPMENT

Before any kind of intervention (taking back, returning, repairing, etc.) by the personnel of Air Liquide Medical Systems or a person appointed by Air Liquide Medical Systems, on the equipment or parts, whether it takes place at Air Liquide Medical Systems or at the Buyer's place, the Buyer agrees to hand over the equipment and/or parts in question, in a clean and sterilized state as far as the exterior is concerned.
If this obligation , specified by circular DGS/5C/DHOS/E2/2001/138 dated 14 March 200, is not honoured, Air Liquide Medical Systems reserves the right to suspend its intervention until the equipment holds no more risk for its personnel or people it has appointed. Air Liquide Medical Systems reserves the right to send back to the Buyer equipment or a part that does not fulfill this condition, with the transport costs charged to the Buyer.

WASTE DISPOSAL

In accordance with article 18 of the Order n° 2005-829 of 20 July 2005 regarding the composition of electric and electronic equipment, the client will ensure the financing and organization of the disposal of waste coming from equipments under the conditions defined in articles 21 and 22 of the said Order. In case of inspection, the producer may ask his client to send him the documents that show he has, for these equipments, respected all the obligations that were transferred to him under the sales contract. If these documents are not sent, it will be presumed that the client is responsible for non -execution of obligations given to his charge and the producer reserves the right to ask him for reparation of any damages he may incur because of this.
In accordance with article 6 of the Order 2005-829 of 20 July 2005, a marking giving the identity of the producer and the date of placing on the market figures on all the equipments.
The producer was duly registered in the National Register of Producers as defined in the Order dated 13 March 2006 regarding the Registration procedure and information figuring in the National Register of Producers as given in Article 23 of Order n° 2005-829, under the following SIREN No : 348 921 735 00026.
According to the legal provisions in force, the client who has taken over the obligations regarding waste disposal has to:

- Make sure that the selective treatment, the valuation and destruction of waste from electric and electronic equipments collected selectively is done in plants that satisfy the technical requirements fixed by the Order of 23 November 2005 regarding the methods of treating waste from electric and electronic equipments as given in article 21 of Order n° 2005-829, or in any other plant authorized for this purpose in another member State of the European Union or in another State when the transfer of this waste outside France is done in accordance with the provisions of the abovementioned Regulation of 1st February 1993.
- Make sure that the selective treatment of material and components of waste from electric and electronic equipments is done and get ting all fluids extracted, in accordance with the prescriptions of the Order of 23 November 2005 regarding the methods of treating waste from electric and electronic equipments as given in article 21 of Order n° 2005-829,

RESPONSIBILITES

In the framework of the Regulations regarding Medical Device Vigilance and the EC markings of Medical Devices , the acquirer agrees to implement (or arrange to do so) the articles of the European Directive 93/42/CEE, especially in the matter of traceability of equipment, registration and declaration of malfunctions, control of documentation and training of technical personnel.
For any equipment fitted with software, the acquirer agrees, before installing it, to take all the necessary precautions for saving, controlling the media (virus).. ; in the absence of these arrangements, Air Liquide Medical Systems would not be held responsible for any kind of damage whatsoever.
It is forbidden to copy or reproduce the software products fully or partially by any means and in any form whatsoever.

RETENTION OF TITLE CLAUSE

THE GOODS REMAIN THE PROPERTY OF AIR LIQUIDE MEDICAL SYSTEMS UNTIL FULL PRICE PAYMENT IS MADE (ACT 80.335 OF 12.05.1980).
They cannot be used as security or for hypothecation before the full price is paid.
Nevertheless, if the buyer holds the unpaid goods, he will personally bear all risks,
and in case of disappearance or destruction of the goods, he will still be the debtor of the agreed price.
In case of payment default, Air Liquide Medical Systems reserves the right to suspend or cancel the delivery of current or future orders.

CONTESTATIONS

ANY DISPUTE WILL COME UNDER THE JURISDICTION OF THE "TRIBUNAL DE COMMERCE" (Court for commercial causes) OF NANTERRE, even in the case of multiple defendants or introduction of third parties. The Bills of Exchange or acceptances of Air Liquide Medical Systems can entail neither substitution nor overriding of this clause of attribution of jurisdiction.

ANY PURCHASE OF OUR SUPPLIES IMPLIES ACCEPTANCE OF OUR GENERAL CONDITIONS OF SALE.

Notes

Notes

Contact

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AIR LIQUIDE Healthcare

Air Liquide Healthcare is a world leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients. It aims to provide customers in the continuum of care from hospital to home with medical products, specialty ingredients and services that contribute to protecting vulnerable lives.